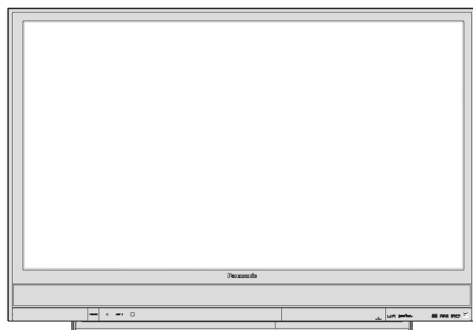


# Service Manual

## Multi Media Display



PbF  
Solder Lead free

**PT-56LCX70**  
**PT-61LCX70**  
**PT-50LCX7**  
**PT-56LCX7**  
**PT-61LCX7**  
**PT-50LCX7K**  
**PT-56LCX70-K**  
**PT-61LCX70-K**

Vol. 2

### **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# CONTENTS

	Page		Page
<b>1 Service Navigation</b> .....	<b>3</b>	9.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT	
1.1. Introduction .....	3	NOTES .....	61
1.2. About Lead Free Solder (PbF) .....	3	9.2. MAIN SCHEMATIC DIAGRAMS .....	62
<b>2 Service Mode</b> .....	<b>4</b>	9.3. VOLTAGE CHART .....	91
<b>3 Troubleshooting Guide</b> .....	<b>11</b>	<b>10 Printed Circuit Board</b> .....	<b>97</b>
3.1. Troubleshooting Hints for Component Level Repair .....	11	10.1. MAIN P.C.B. ....	97
<b>4 Service Fixture &amp; Tools</b> .....	<b>27</b>	<b>11 Appendix Information of Schematic Diagram</b> .....	<b>107</b>
4.1. Service Fixture and Tools .....	27	11.1. CHECKING POINT TABLE OF THE CSP IC .....	107
4.2. Service Position .....	29	11.2. WAVEFORM TABLE .....	109
4.3. Replacement Procedures for CSP (Chip Size Package) IC		<b>12 Exploded Views</b> .....	<b>110</b>
.....	37	12.1. OPTICAL UNIT SECTION .....	110
<b>5 Disassembly and Assembly Instructions</b> .....	<b>39</b>	12.2. MAIN P.C.B. UNIT AND TOP DUCT UNIT SECTION ..	111
5.1. Optical Section .....	39	<b>13 Replacement Parts List</b> .....	<b>112</b>
<b>6 Measurements and Adjustments</b> .....	<b>46</b>	13.1. REPLACEMENT NOTES .....	112
6.1. Adjustment Procedures 2 .....	46	13.2. MECHANICAL REPLACEMENT PARTS LIST .....	113
<b>7 Maintenance</b> .....	<b>53</b>	13.3. SERVICE FIXTURES AND TOOLS REPLACEMENT	
7.1. Cleaning Methods .....	53	PARTS LIST .....	113
<b>8 Block Diagrams</b> .....	<b>55</b>	13.4. ELECTRICAL REPLACEMENT PARTS LIST .....	113
<b>9 Schematic Diagrams</b> .....	<b>61</b>		

# 1 Service Navigation

## 1.1. Introduction

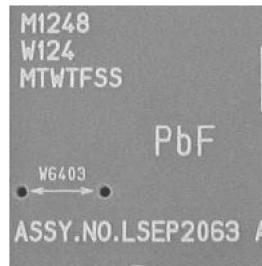
This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

## 1.2. About Lead Free Solder (PbF)

### Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.  
(Please refer to figures.)



Printed case

### CAUTION:

- Pb free solder has a higher melting point than standard solder;  
Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.  
Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).  
In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.  
When soldering or unsoldering, completely remove all of the solder from the pins or solder area,  
and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

### Recommendations

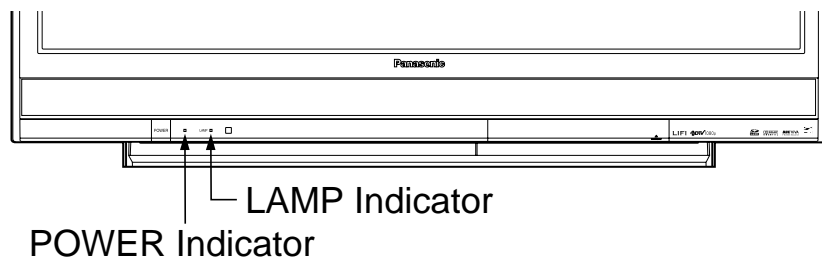
Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

## 2 Service Mode

### INDICATIONS FOR ERROR CONDITIONS

Each Indicator facilitates finding the cause of an error.

When an error is detected, the Lamp goes off and the indicators on the front flash.



(Note 1)

Priority	Error Information	POWER Indicator flashes orange	LAMP Indicator flashes red	SOS	LAMP OFF	RESET
1	Over voltage/Over current (SOS)	1	-	01	○	AC ON/OFF
2	Abnormal voltage (DTV+9V line)	2	-	02	○	
3	Abnormal voltage (SUB+5V line)	3	-	03	○	
4	Abnormal voltage (MAIN+3.3V line)	4	-	04	○	
5	IC4501 (Audio Amp) failure	6	-	06	○	
6	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	7	-	07	○	
7	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	9	-	09	○	
8	Abnormal voltage (POWER+17V line)	10	-	0A	○	Power ON/OFF
13	Lamp does not light up	-	2	02	○	
10	Lamp failure	-	3	03	○	
11	Abnormal Lamp temperature	-	4	04	○	
12	Lamp communication error	-	5	05	○ (Note 2)	AC ON/OFF
15	Lamp Fan stops	-	8	08	○	
16	Fan Case Unit (OPT Fan) stops	-	9	09	○	
17	Front Fan or Rear Fan stops	-	10	0A	○	
18	Rear Fan or Front Fan stops	-	11	0B	○	
14	Rear Jack PCB connection error	-	12	0C	○	Power ON/OFF
9	Abnormal Lamp input voltage (+28V)	-	13	0D	○	

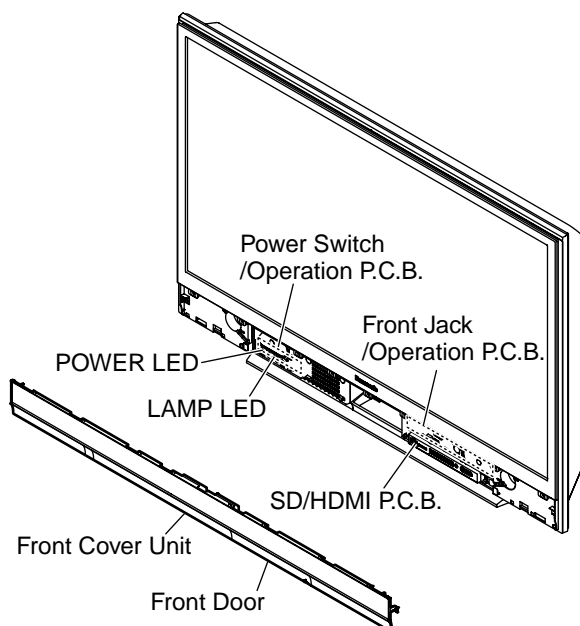
**Note:**

1. The detected Error data will be stored in the EEPROM, and SOS History (Code) is displayed in Self Check mode or Service Adjust mode (SRV-TOOL).
2. The Lamp Indicator will flash X5 immediately after the Lamp goes off. For this SOS only, the TV power will remain on.

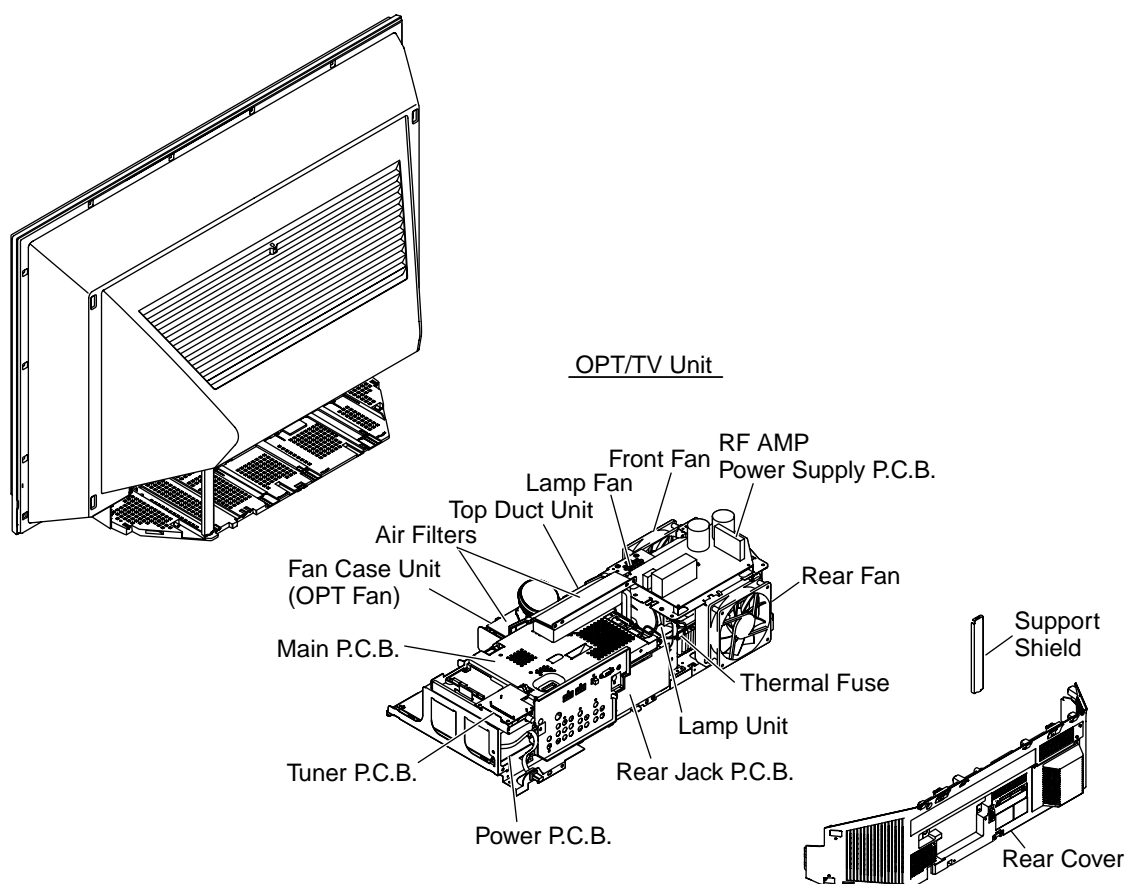


## MAIN PARTS LOCATION

### <Front View>



### <Rear View>



## SERVICE ADJUST MODE

In this mode, the following information can be confirmed on the screen:

### ADJUST

- Contrast adjustment

### WB-ADJ

- White Balance adjustment

### OPTION

- Current Lamp elapsed time

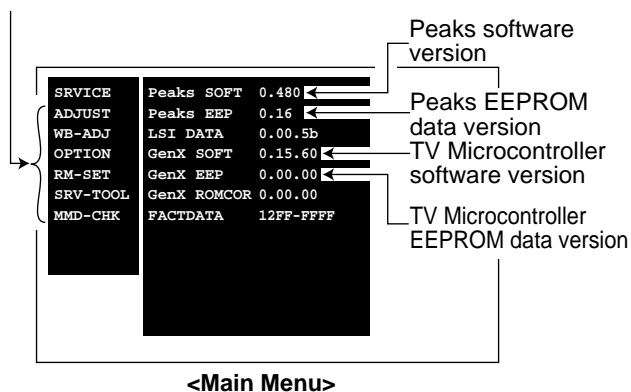
### RM-SET (Not used for service)

### SRV-TOOL

- SOS History
- The number of times of the power has turned on
- Current Power on elapsed time

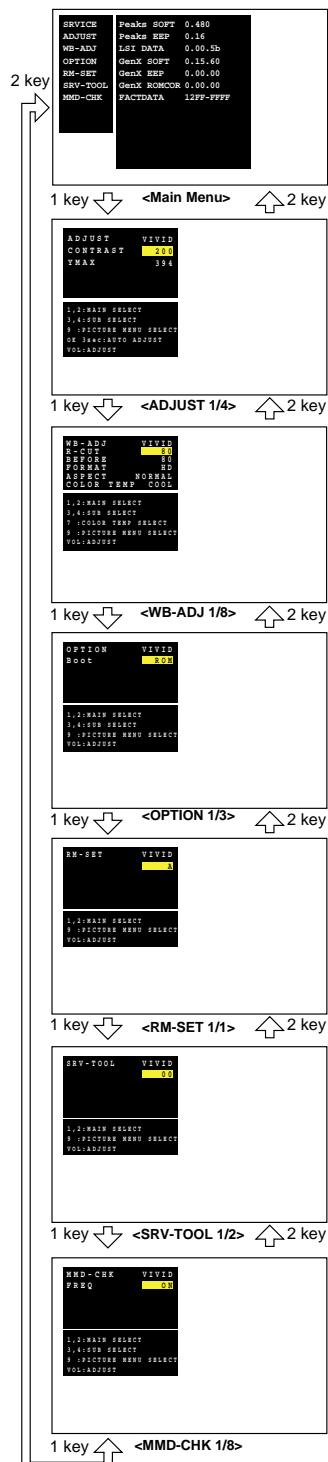
### MMD-CHK

- Focus, Tilt, H/V Picture Position adjustment
- Internal pattern for LCD-CHK, GC-CHK



## Service Adjust Mode

Enter:  
VOLUME DOWN button + RECALL key (3 times)  
(in power on condition)



**CAUTION:**  
Do not change any parameters!

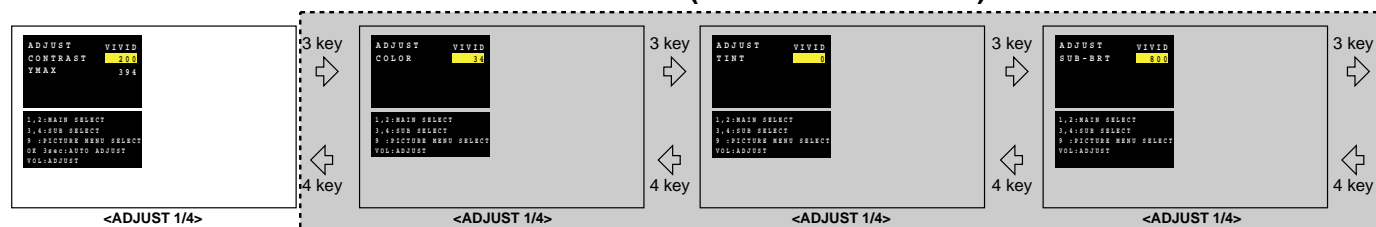
Exit from Main Menu:  
Power OFF.

Fig. 2-1

**ADJUST 1/4~4/4**

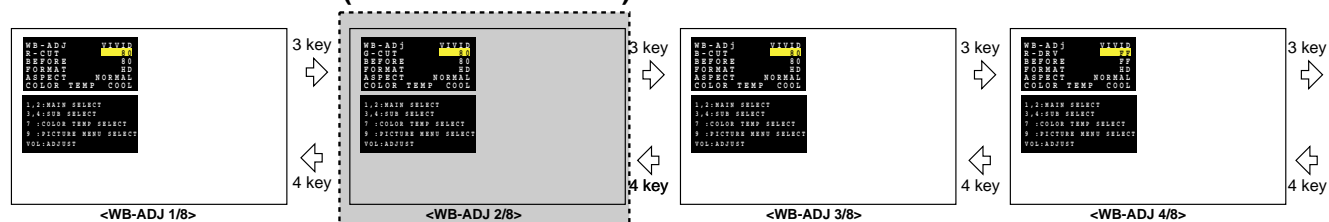
Perform the Contrast adjustment by pressing OK key when replacing EEPROM IC (IC8201).

(Not used for service)

**WB-ADJ 1/8~8/8**

Perform the White Balance adjustment by pressing VOL+/- key.

(Not used for service)



(Not used for service)

(Not used for service)

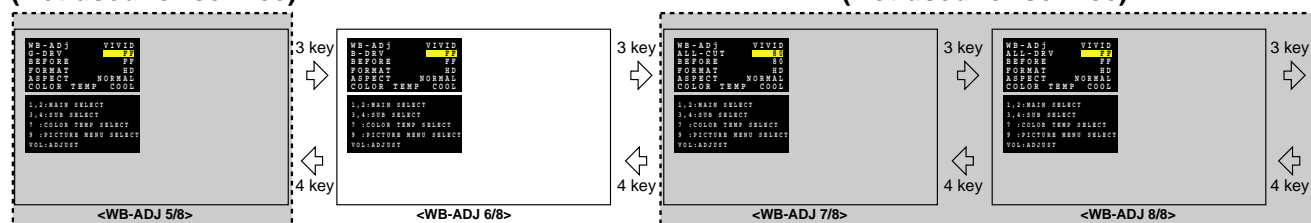


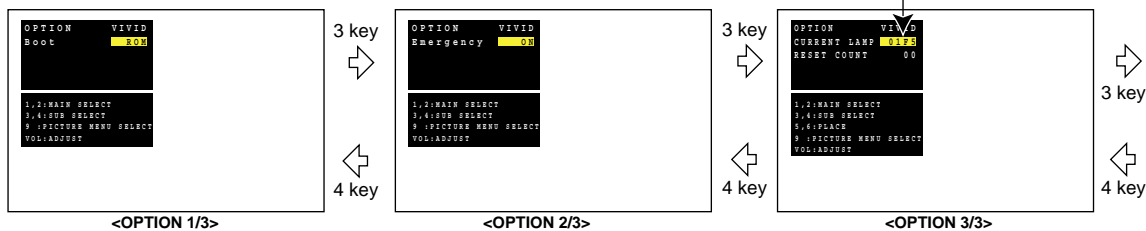
Fig. 2-2

**OPTION 1/3~3/3**

Confirm the current elapsed "Lamp operation" time in hours, in hexadecimal. (limit: FFFF)

Current elapsed "Lamp operation" time  
eg.) 01F5

501 hour

**SRV-TOOL 1/2~2/2**

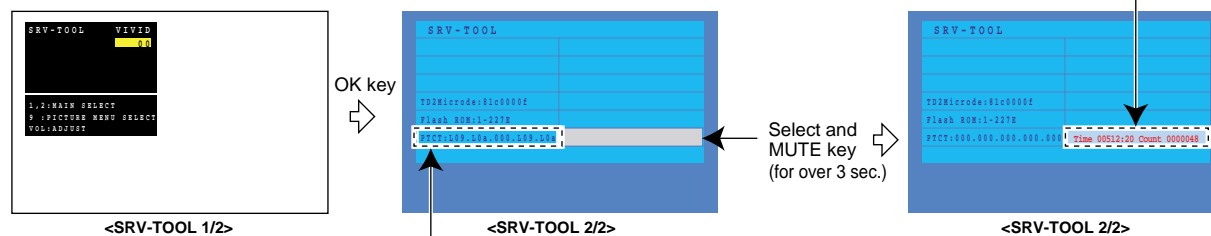
Confirm the number of times the power has turned on, the current elapsed "Power on" time in hours and minutes. (limit: 65535:00) and SOS History.

Current elapsed "Power on" time  
eg.) Time 00512:20

512 hour /20 min.

The number of times the power has turned on  
eg.) Count 0000048

48 times



SOS History

eg.) PTCT: P04.L0b.L0b.P04.L0b

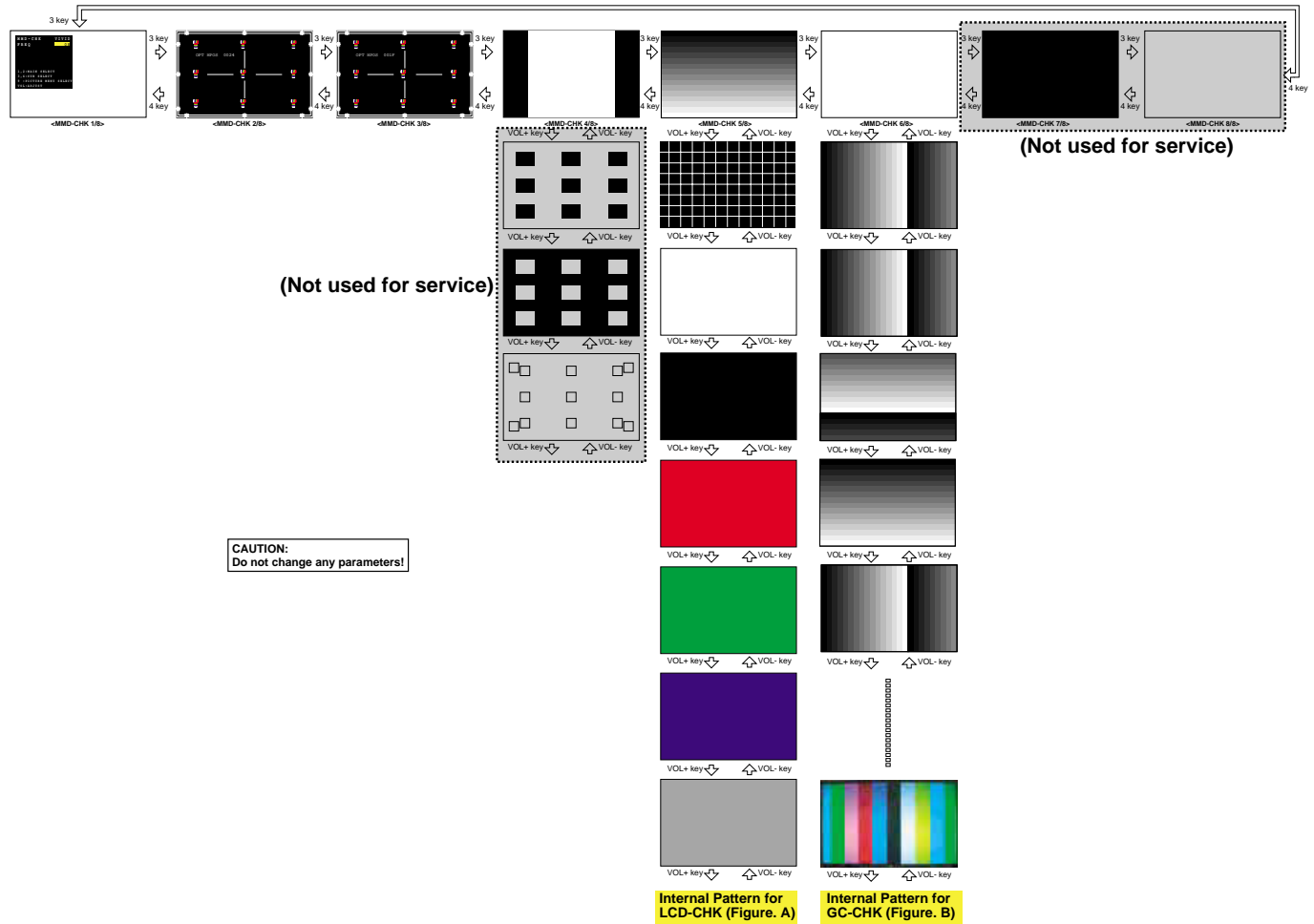
the 1st SOS after shipment/last self check  
the 2nd SOS after shipment/last self check  
the SOS before previous  
previous SOS  
latest SOS

**Exit from SRV-TOOL 2/2:**

Unplug the AC Cord.

### MMD-CHK 1/8~8/8 and internal pattern

Perform the Picture Position adjustment by pressing VOL+/- key, and display the internal pattern for LCD-CHK, GC-CHK.



## EEPROM IC (IC5504) CAUTION

DO NOT copy any of data of EEPROM IC (IC5504) on the Main P.C.B. using the ROM Writer. (It has HDCP key data.)

## EEPROM IC (IC8201) CAUTION

DO NOT copy any of data of EEPROM IC (IC8201) on the Main P.C.B. using the ROM Writer. (It has CPRM key data of GallayPlayer.)

## LAMP CAUTION

The Lamp Unit becomes very hot during operation. When replacing the Lamp Unit, wait until it has cooled off (1 hour or more).

## TOP DUCT UNIT NOTE

The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed. Therefore, it is strongly recommend to remove the Top Duct Unit only in a clean room.

## TUNER DIAGNOSTIC MODE

### TUNER DIAGNOSTIC

**Enter:**

VOLUME UP button + VOLUME UP key  
(for more than 5 seconds in power on condition)



TUNE Status		System	
TUNE CH		Soft Version	0.338
Current CH	4(4)		
FAT Status		Video/Channel Status	
Mode	N/A	Type	Digital
Frequency	67.75 MHz	PCR Status	Unlocked
Lock Status	Unlocked	PCR pid	N/A
SNR	---dB	Video pid	N/A
		Audio pid	N/A
		Audio type	N/A
		CC	CC Waiting
Press Exit to return. Press UP/DOWN or NUMBER, and OK to change the channel.			

<Tuner Diagnostic>

**Exit:**

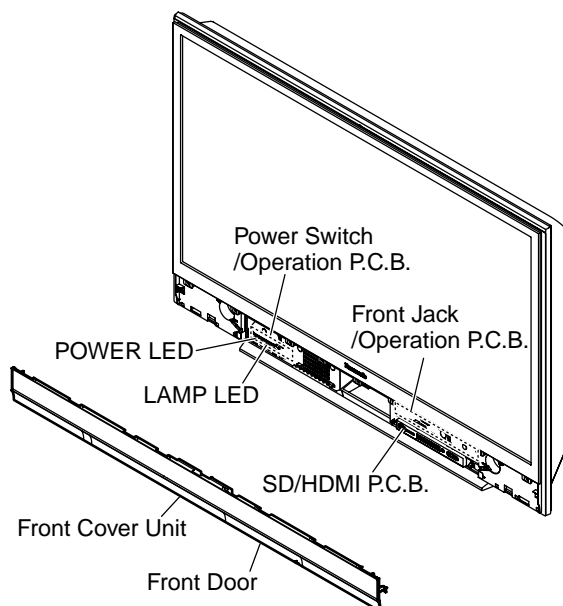
Press EXIT key.

## 3 Troubleshooting Guide

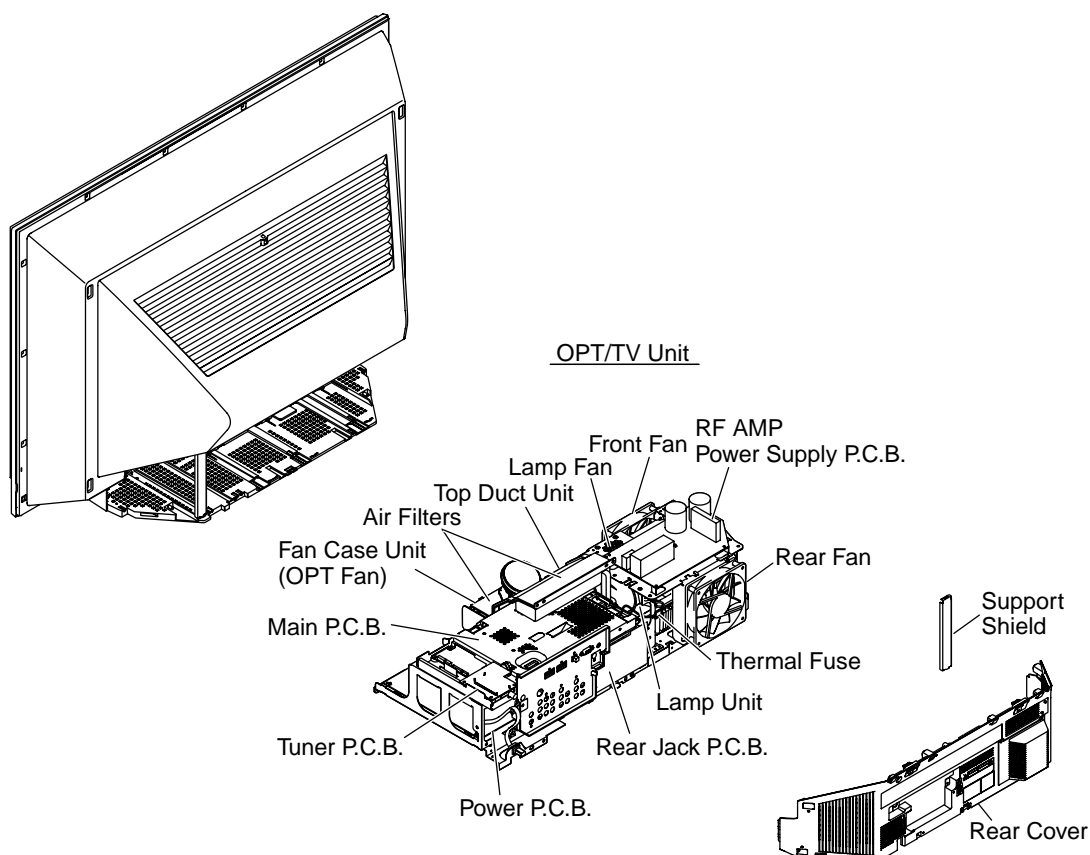
### 3.1. Troubleshooting Hints for Component Level Repair

#### MAIN PARTS LOCATION

<Front View>



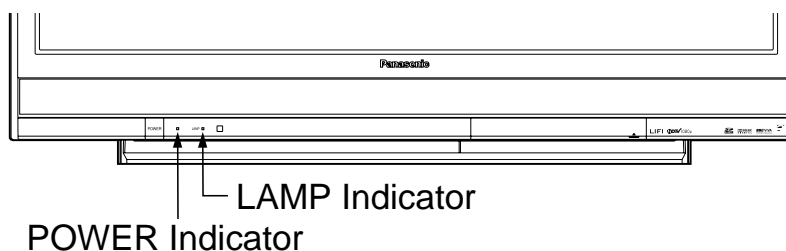
<Rear View>



## INDICATIONS FOR ERROR CONDITIONS

Each Indicator facilitates finding the cause of an error.

When an error is detected, the Lamp goes off and the indicators on the front flash.



(Note 1)

Priority	Error Information	POWER Indicator flashes orange	LAMP Indicator flashes red	SOS	LAMP OFF	RESET
1	Over voltage/Over current (SOS)	1	-	01	○	AC ON/OFF
2	Abnormal voltage (DTV+9V line)	2	-	02	○	
3	Abnormal voltage (SUB+5V line)	3	-	03	○	
4	Abnormal voltage (MAIN+3.3V line)	4	-	04	○	
5	IC4501 (Audio Amp) failure	6	-	06	○	
6	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	7	-	07	○	
7	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	9	-	09	○	
8	Abnormal voltage (POWER+17V line)	10	-	0A	○	
13	Lamp does not light up	-	2	02	○	Power ON/OFF
10	Lamp failure	-	3	03	○	
11	Abnormal Lamp temperature	-	4	04	○	
12	Lamp communication error	-	5	05	○ (Note 2)	
15	Lamp Fan stops	-	8	08	○	AC ON/OFF
16	Fan Case Unit (OPT Fan) stops	-	9	09	○	
17	Front Fan or Rear Fan stops	-	10	0A	○	
18	Rear Fan or Front Fan stops	-	11	0B	○	
14	Rear Jack PCB connection error	-	12	0C	○	
9	Abnormal Lamp input voltage (+28V)	-	13	0D	○	Power ON/OFF

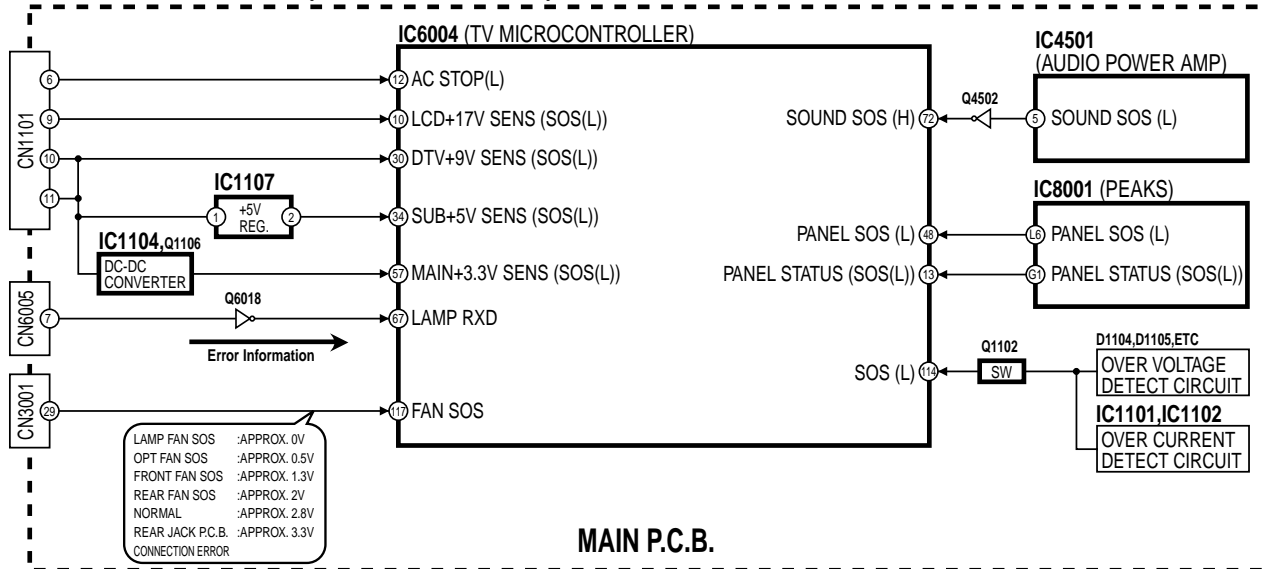
### Note:

1. The detected Error data will be stored in the EEPROM, and SOS History (Code) is displayed in Self Check mode or Service Adjust mode (SRV-TOOL).
2. The Lamp Indicator will flash X5 immediately after the Lamp goes off. For this SOS only, the TV power will remain on.

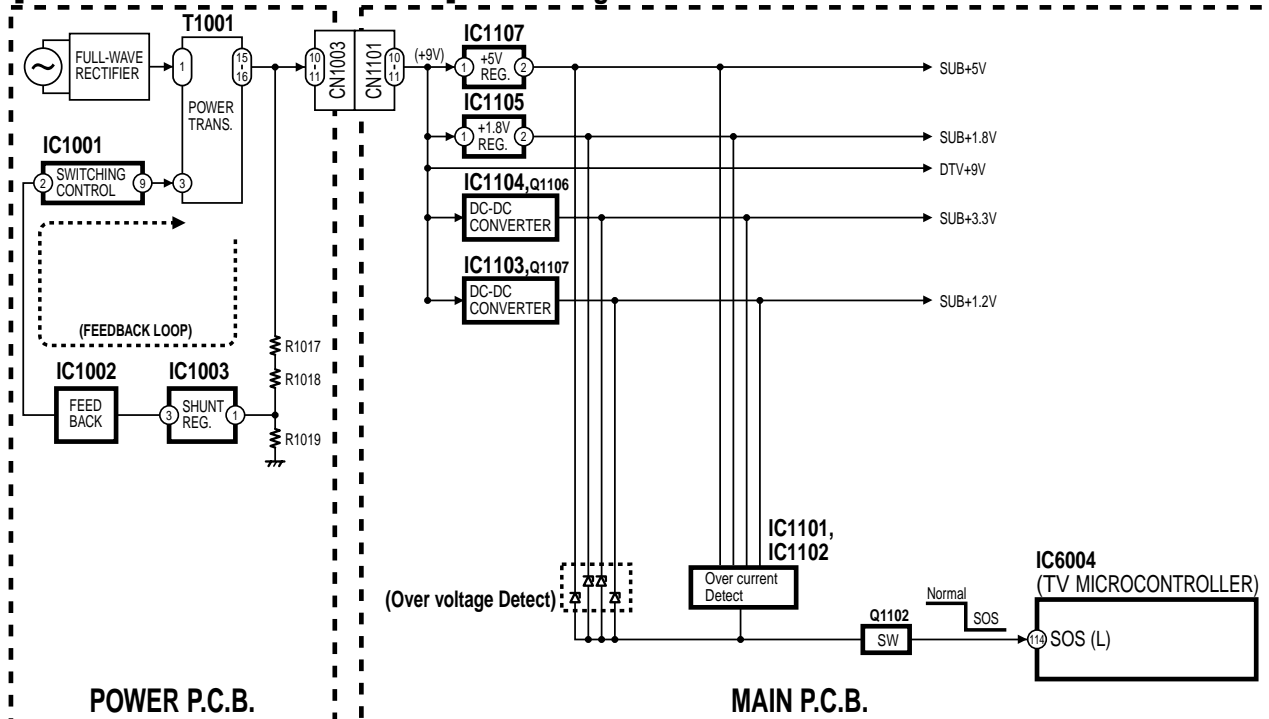


## Protection Circuit

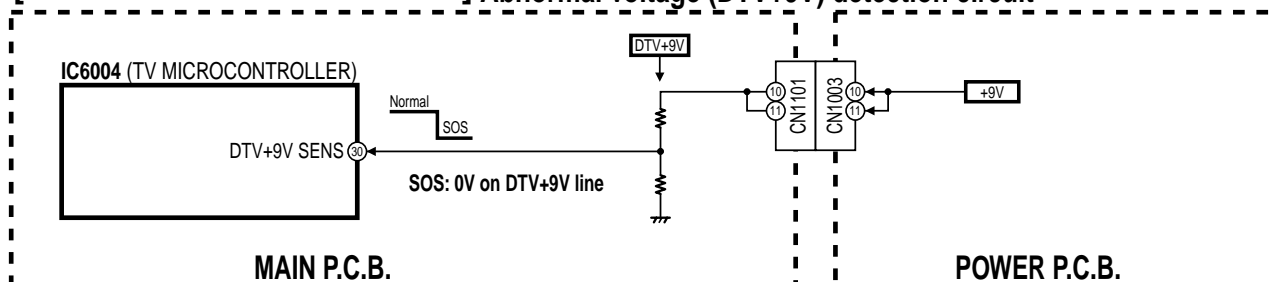
### SOS terminal of IC6004 (TV microcontroller)

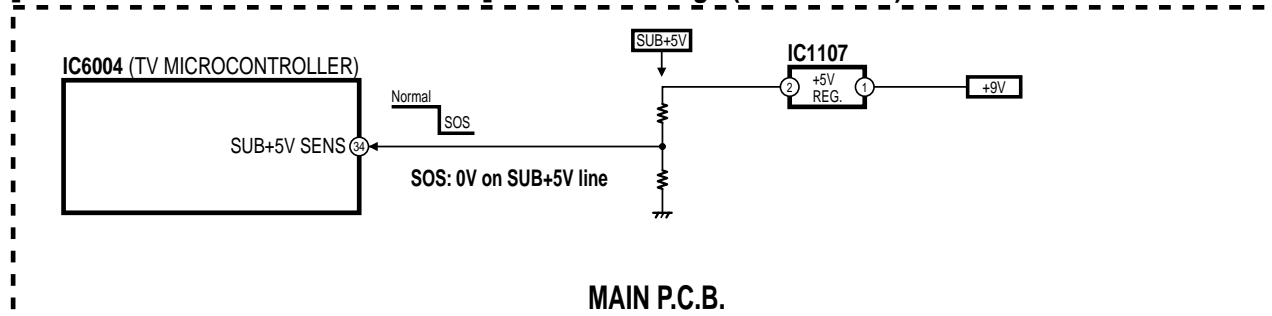
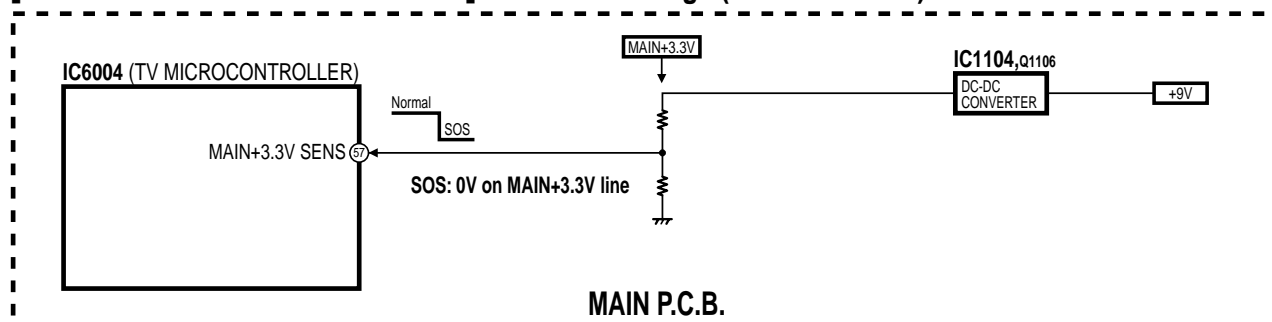
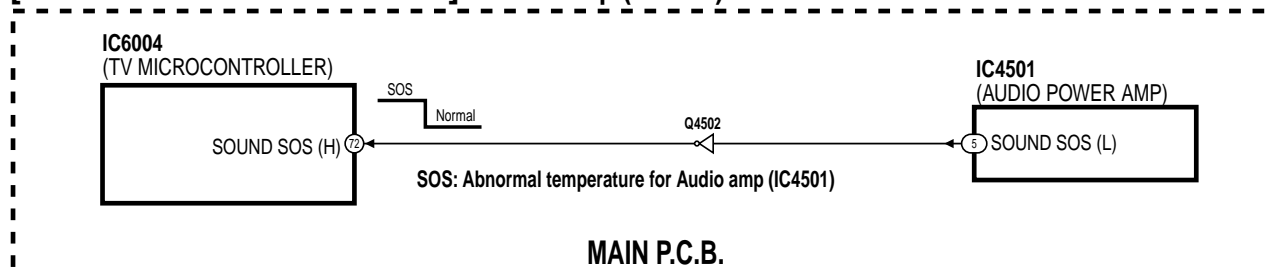
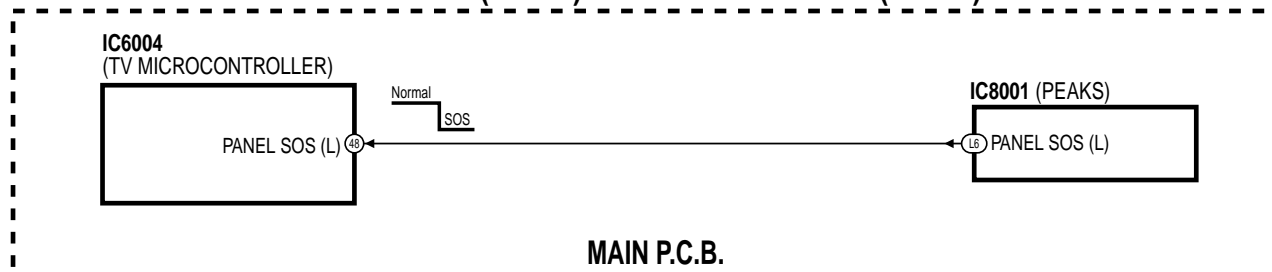


### [POWER Indicator one blink] Over voltage/current detection circuit



### [POWER Indicator two blinks] Abnormal voltage (DTV+9V) detection circuit



**[POWER Indicator three blinks] Abnormal voltage (SUB+5V line) detection circuit****[POWER Indicator four blinks] Abnormal voltage (MAIN+3.3V line) detection circuit****[POWER Indicator six blinks] Audio Amp (IC4501) failure detection circuit****[POWER Indicator seven blinks]****Communication error between Peaks (IC8001) and TV microcontroller (IC6004) detection circuit**



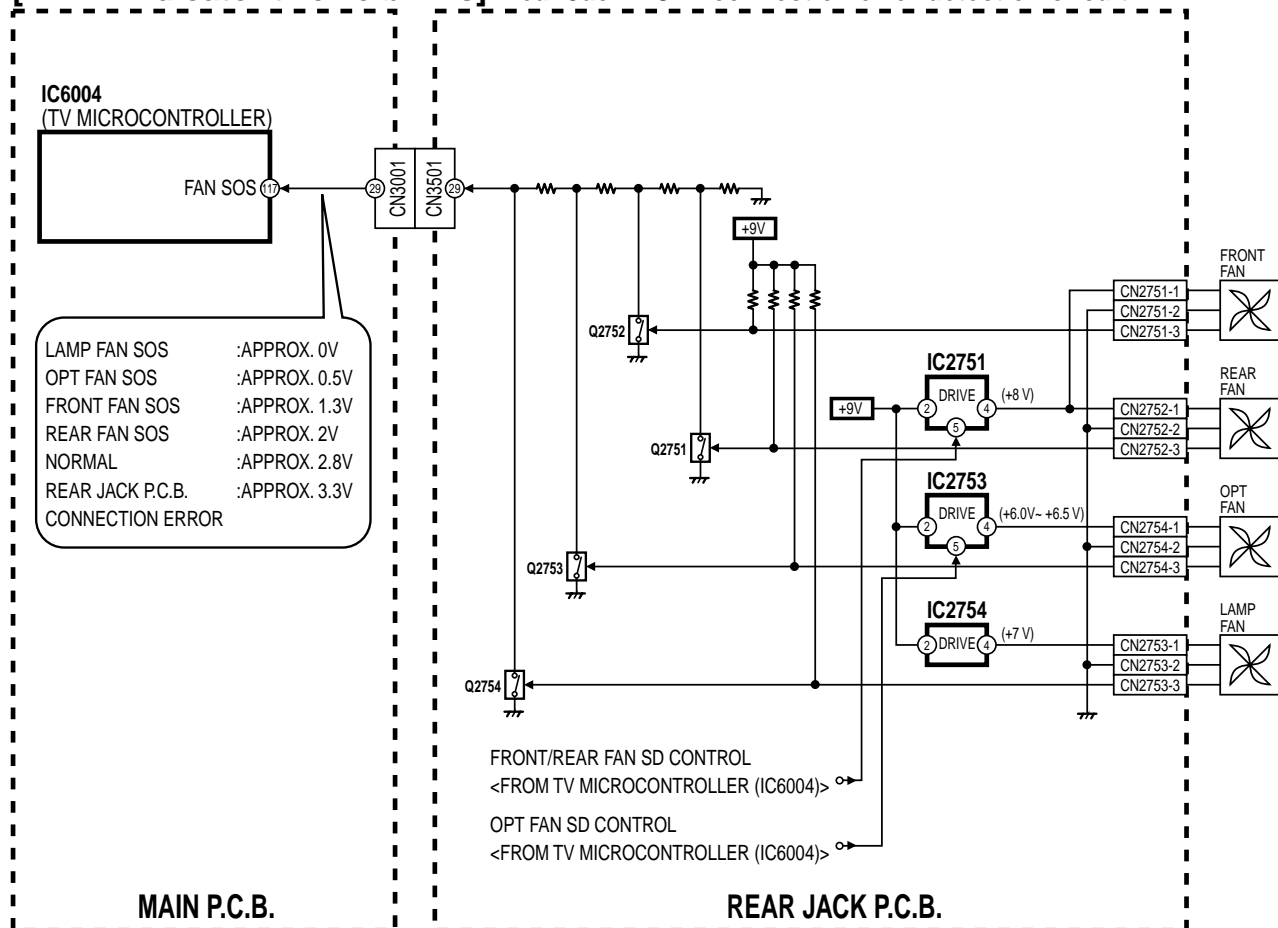
[LAMP Indicator eight blinks] LAMP Fan stops detection circuit

[LAMP Indicator nine blinks] OPT Fan stops detection circuit

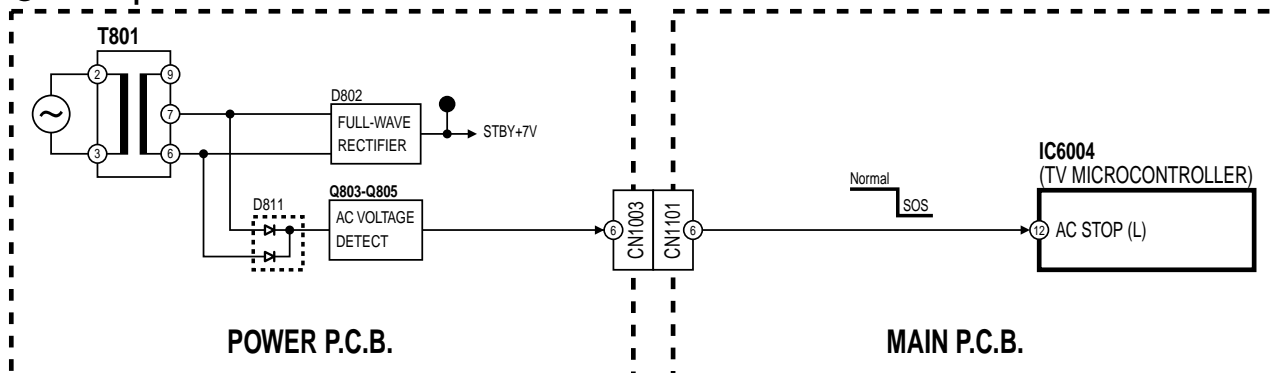
[LAMP Indicator ten blinks] Front Fan or Rear Fan stops detection circuit

[LAMP Indicator eleven blinks] Rear Fan or Front Fan stops detection circuit

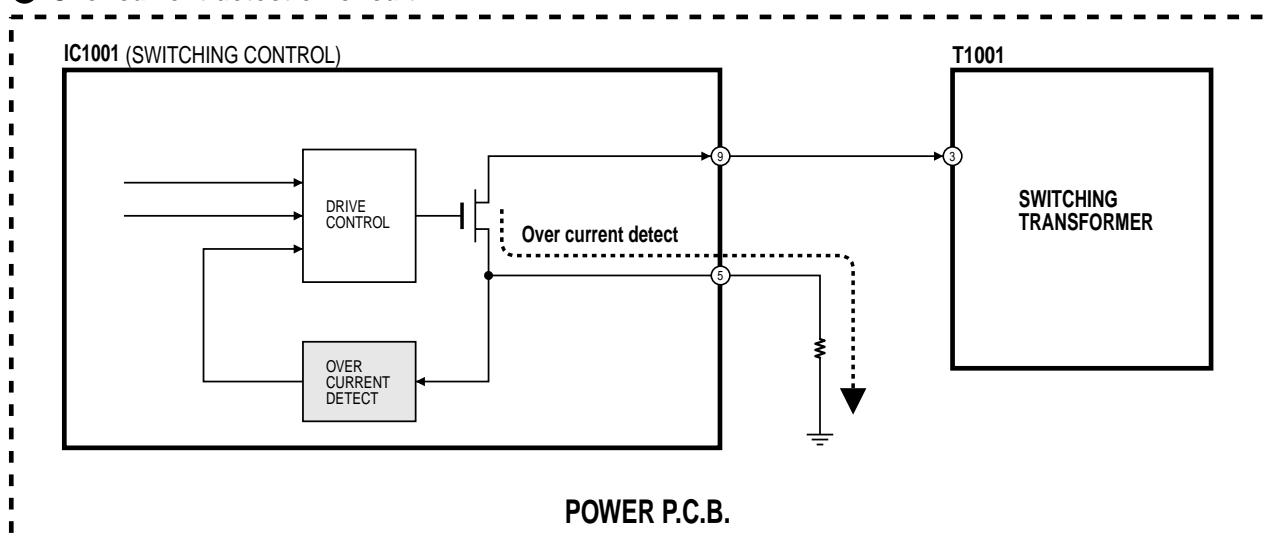
[LAMP Indicator twelve blinks] Rear Jack P.C.B. connection error detection circuit



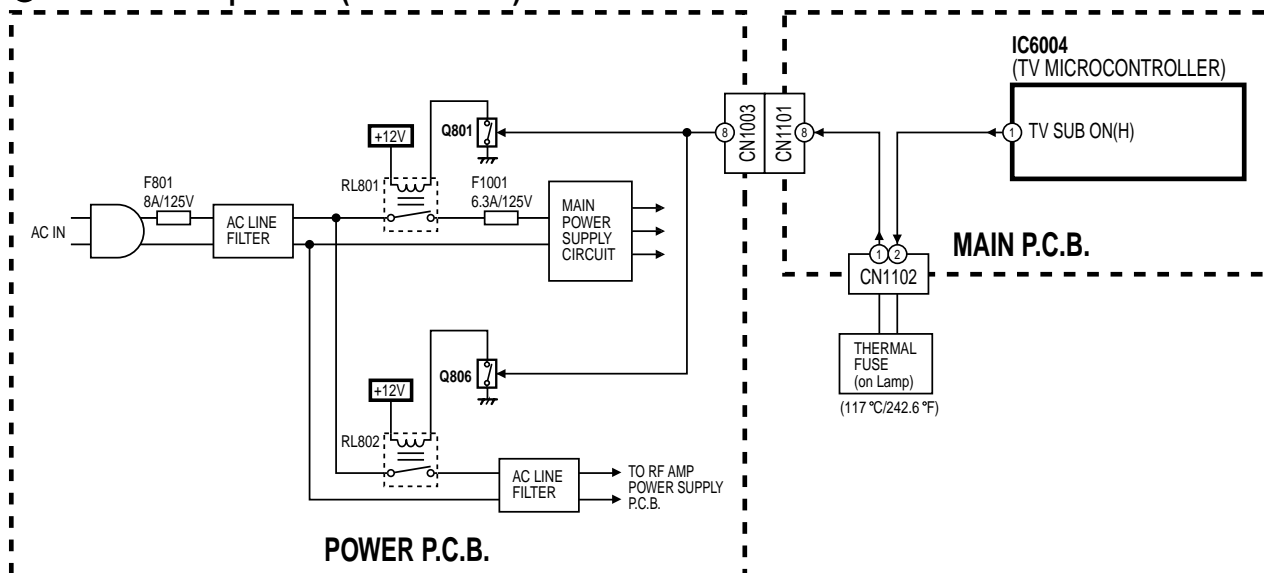
### ● AC stop detection circuit



### ● Over current detection circuit



### ● Abnormal Temperature (Thermal fuse) detection circuit



## How to solve problems indicated by the Error Indication

(The symptom of all errors is that the Lamp goes off)

**Note:** Before performing troubleshooting, confirm that all connector cables in the unit are connected correctly.

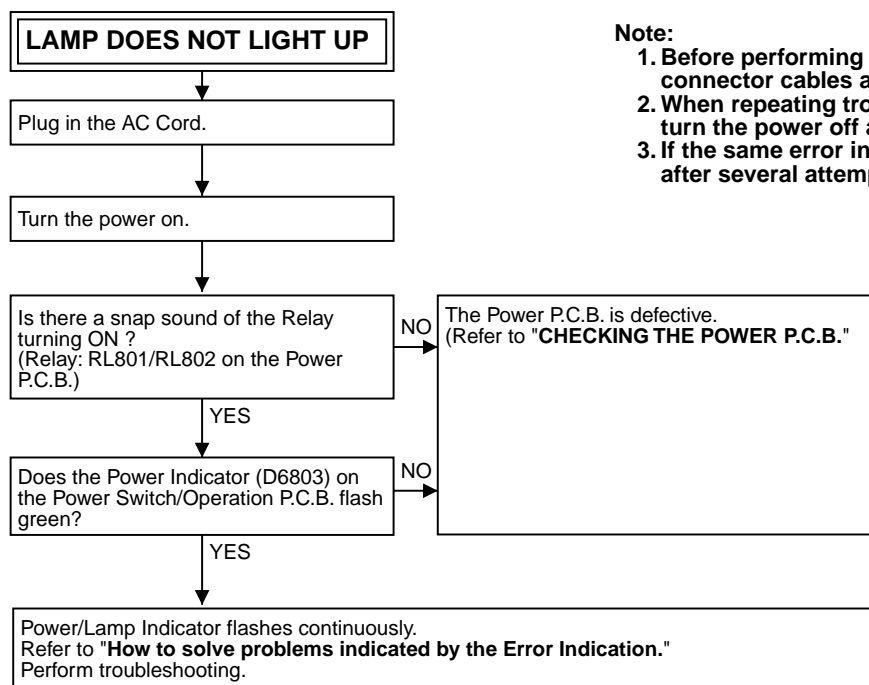
POWER Indicator	Problem	Possible Solution
<b>1</b>	<b>[POWER Indicator one blink]</b> The following voltage lines on the Main P.C.B. is over current. • SUB+5V line • SUB+1.8V line • SUB+3.3V line • SUB+1.2V line  The following voltage lines on the Main P.C.B. is over voltage. • SUB+5V line • SUB+1.8V line • SUB+3.3V line • SUB+1.2V line	1. Check the Power P.C.B. (Refer to " <b>CHECKING THE POWER P.C.B.</b> ") 2. If still NG, check DC/DC circuit on the Main P.C.B. (Refer to " <b>CHECKING THE OPT/TV UNIT (Main P.C.B.)</b> ".)
<b>2</b>	<b>[POWER Indicator two blinks]</b> DT+9V line error.	1. Check that Connector CN1102 (Thermal Fuse) on the Main P.C.B. is connected firmly. 2. If still NG, check the Power P.C.B. (Refer to " <b>CHECKING THE POWER P.C.B.</b> ") 3. If still NG, check the following parts of DT+9V line on the Main P.C.B., and replace if necessary. • R6011, IC6004, and the surrounding parts.
<b>3</b>	<b>[POWER Indicator three blinks]</b> SUB+5V line error.	1. Check the following parts of the SUB+5V line on the Main P.C.B., and replace if necessary. • R6134, IC1107, IC6004, and the surrounding parts.
<b>4</b>	<b>[POWER Indicator four blinks]</b> MAIN+3.3V line error.	1. Check the following parts of the MAIN+3.3V line on the Main P.C.B., and replace if necessary. • R6106, IC1104, IC6004, Q1104-Q1106, and the surrounding parts.
<b>6</b>	<b>[POWER Indicator six blinks]</b> AUDIO AMP (IC4501) failure	1. Check the voltage at Pin 5 of IC4501 on the Main P.C.B. If +3.3V(High), replace IC4501. If 0V(Low), check the following parts of the SOUND SOS line between Pin 5 of IC4501 and Pin 72 of IC6004 on the Main P.C.B., and replace if necessary. • Q4502, IC6004, and the surrounding parts.
<b>7</b>	<b>[POWER Indicator seven blinks]</b> Communication error between Peaks (IC8001) and TV microcontroller (IC6004) on the Main P.C.B.	1. Check the following parts of the PANEL SOS(L) line between Pin L16 of IC8001 and Pin 48 of IC6004 on the Main P.C.B., and replace if necessary. • IC8001, IC6004, and the surrounding parts.
<b>9</b>	<b>[POWER Indicator nine blinks]</b> Communication error between Peaks (IC8001) and TV microcontroller (IC6004) on the Main P.C.B.	1. Check the following parts of the PANEL STATUS (SOS(L)) line between Pin G1 of IC8001 and Pin 13 of IC6004 on the Main P.C.B., and replace if necessary. • IC8001, IC6004, and the surrounding parts.
<b>10</b>	<b>[POWER Indicator ten blinks]</b> LCD+17V line error.	1. Check the Power P.C.B. (Refer to " <b>CHECKING THE POWER P.C.B.</b> ") 2. Check the following parts of the LCD+17V line on the Main P.C.B. and replace if necessary. • R6184, IC6004, and the surrounding parts.

## How to solve problems indicated by the Error Indication

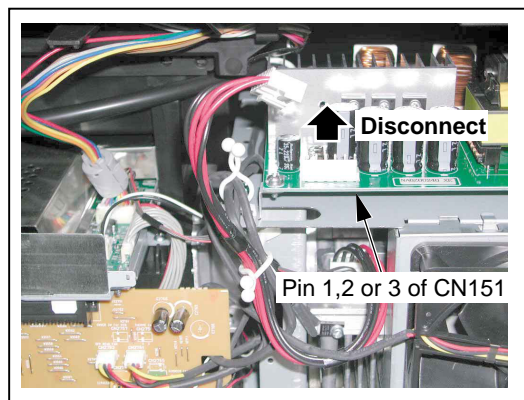
(The symptom of all errors is that the Lamp goes off)

**Note:** Before performing the troubleshooting, confirm that all connector cables in the unit are connected correctly.

LAMP Indicator	Problem	Possible Solution															
<b>2</b>	<b>[LAMP Indicator two blinks]</b> Lamp does not light up.	1. Try to turn on the power several times. (Wait 5 minutes before retrying.) 2. If still NG, replace the Lamp Unit.															
<b>3</b>	<b>[LAMP Indicator three blinks]</b> Lamp failure (Internal Lamp thermistor open or short).	1. Try to turn on the power several times. (Wait 5 minutes before retrying.) 2. If still NG, replace the Lamp Unit.															
<b>4</b>	<b>[LAMP Indicator four blinks]</b> Abnormal Lamp temperature (more than 92 °C).	1. Relocate the unit to a proper location. Keep the unit at least 100 mm (4") away from the wall to provide proper ventilation because warm air is discharged. Blocking the ventilation opening of the cooling fan may damage the unit. 2. Wait until the Lamp has cooled off (approximately 1 hour) and try to turn on the power several times. 3. If still NG, check whether the Fans rotate normally and Fan voltages, and repair if necessary. <table border="1"> <thead> <tr> <th>Fan</th><th>Check Point</th><th>Voltage (Normal ~ High)</th></tr> </thead> <tbody> <tr> <td>Lamp Fan</td><td>CN2753 (Pin 1) or TP2758</td><td>7.0 V</td></tr> <tr> <td>OPT Fan</td><td>CN2754 (Pin 1) or TP2757</td><td>6.0 V ~ 6.5 V</td></tr> <tr> <td>Front Fan</td><td>CN2751 (Pin 1) or TP2759</td><td>8.0 V</td></tr> <tr> <td>Rear Fan</td><td>CN2752 (Pin 1) or TP2759</td><td>8.0 V</td></tr> </tbody> </table> 4. If still NG, replace the Lamp Unit.	Fan	Check Point	Voltage (Normal ~ High)	Lamp Fan	CN2753 (Pin 1) or TP2758	7.0 V	OPT Fan	CN2754 (Pin 1) or TP2757	6.0 V ~ 6.5 V	Front Fan	CN2751 (Pin 1) or TP2759	8.0 V	Rear Fan	CN2752 (Pin 1) or TP2759	8.0 V
Fan	Check Point	Voltage (Normal ~ High)															
Lamp Fan	CN2753 (Pin 1) or TP2758	7.0 V															
OPT Fan	CN2754 (Pin 1) or TP2757	6.0 V ~ 6.5 V															
Front Fan	CN2751 (Pin 1) or TP2759	8.0 V															
Rear Fan	CN2752 (Pin 1) or TP2759	8.0 V															
<b>5</b>	<b>[LAMP Indicator five blinks]</b> Lamp communication error.	1. Try to turn on the power several times. (Wait 5 minutes before retrying.) 2. If still NG, check that the cable between CN6005 on the Main P.C.B. and the Lamp Unit is connected firmly. 3. If still NG, replace the Lamp Unit. 4. If still NG, check signal of the LAMP TXD, LAMP RXD line at Pin 1, 7 of CN6005 on the Main P.C.B. and check the following parts on the Main P.C.B., and replace if necessary. • Q6017, Q6018, R6169, R6193 and the surrounding parts.															
<b>8</b>	<b>[LAMP Indicator eight blinks]</b> Cooling Fan (Lamp Fan) malfunction.	1. Check that Connector CN2753 on the Rear Jack P.C.B. is connected firmly. 2. If still NG, replace the Lamp Fan. 3. If still NG, check IC2754 and surrounding parts, and replace if necessary.															
<b>9</b>	<b>[LAMP Indicator nine blinks]</b> Cooling Fan (OPT Fan) malfunction.	1. Check that Connector CN2754 on the Rear Jack P.C.B. is connected firmly. 2. If still NG, replace the Fan Case Unit (OPT Fan). 3. If still NG, check IC2753 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.															
<b>10</b>	<b>[LAMP Indicator ten blinks]</b> Cooling Fan (Front Fan or Rear Fan) malfunction.	1. Check that Connector CN2751 or CN2752 on the Rear Jack P.C.B. is connected firmly. 2. If still NG, check whether the Front Fan or Rear Fan stopped and replace it. 3. If still NG, check IC2751 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.															
<b>11</b>	<b>[LAMP Indicator eleven blinks]</b> Cooling Fan (Rear Fan or Front Fan) malfunction.	1. Check that Connector CN2752 or CN2751 on the Rear Jack P.C.B. is connected firmly. 2. If still NG, check whether the Front Fan or Rear Fan stopped and replace it. 3. If still NG, check IC2751 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.															
<b>12</b>	<b>[LAMP Indicator twelve blinks]</b> Rear Jack P.C.B. connection error.	1. Check that Connector CN3501 on the Rear Jack P.C.B. is connected into Connector CN3001 on the Main P.C.B. firmly. 2. If still NG, check the following parts at FAN SOS line between Pin 29 of CN3001 and Pin 117 of IC6004 on the Main P.C.B., and replace if necessary. • R6025, IC6004, and the surrounding parts.															
<b>13</b>	<b>[LAMP Indicator thirteen blinks]</b> Abnormal Lamp input voltage (+26V) Normal: +26V Abnormal: less than +20V	1. Try to turn on the power several times. (Wait 5 minutes before retrying.) 2. If still NG, check that Connector CN1 and CN151 on the RF AMP Power Supply P.C.B. are connected firmly. 3. If still NG, unplug the AC Cord and disconnect CN151 connector cable and check the voltage at Pin 1, 2 or 3 of CN151 on the RF AMP Power Supply P.C.B. <b>See Figure a.</b> If OK (+26V), replace the Lamp Unit. 4. If NG, check the voltage between Pin 1 and Pin 2 of CN1 on the RF Amp Power Supply P.C.B. If OK (AC120V), replace the RF Amp Power Supply P.C.B. If NG, check the Power P.C.B. (Refer to "CHECKING THE POWER P.C.B.")															

**Note:**

1. Before performing troubleshooting, confirm that all connector cables are connected properly.
2. When repeating troubleshooting, be sure to turn the power off and unplug the AC Cord.
3. If the same error indication repeatedly occurs after several attempts, proceed to the next step.

**Figure. a**



## CHECKING THE POWER P.C.B.

Disconnect all Power P.C.B. connector cables, then remove Power P.C.B. from the unit.

**Refer to Power P.C.B. Service Position, Figure 1.**

Check the following parts on the Power P.C.B. with the tester.

D802, D807, D808, D811, D814,  
D1001, D1002, D1003, D1004, D1006, D1007, D1008, D1009, D1010, D1011, D1012, D1016, D1017,  
F801, F1001, IC1001 (Between Pin9 and Pin5), IC1002, IC1003,  
PR1001, Q803, Q804, Q805, Q1001,  
R806, R1006, R1009, R1011, R1022, R1026,

OK

NG

Replace any defective parts.

Solder a jumper wire between TP810 and TP805 on the Power P.C.B.

Plug in the AC Cord.

Is there a snap sound of the Relay turning ON?  
(Relay: RL801, RL802 on the Power P.C.B.)

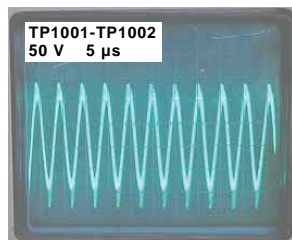
NO

Check the following parts on the Power P.C.B. with the tester.  
D802, D807, D809, D852,  
Q801, Q806,  
R807, R808, R826, R827,  
RL801, RL802, T801  
Replace any defective parts.

Check the other parts on the Power P.C.B. and replace any defective parts.

OK

Check the waveform between TP1001 and TP1002  
(or between Pin 9 of IC1001 and HOT GND) on the Power P.C.B.



NG

OK

Check the voltage at the following points. (Use Pin 12 of CN1003 as GND.)

- CN1003 (Pin 5): approx. +9.5 V [STBY\_7V]
- CN1003 (Pin 7): approx. +30 V [REG\_30V]
- CN1003 (Pin 10): approx. +9 V [REG\_9V]
- CN1003 (Pin 1): approx. +18 V [AUDIO\_18V]
- CN1003 (Pin 9): approx. +17 V [LCD\_DRIVE\_17V]

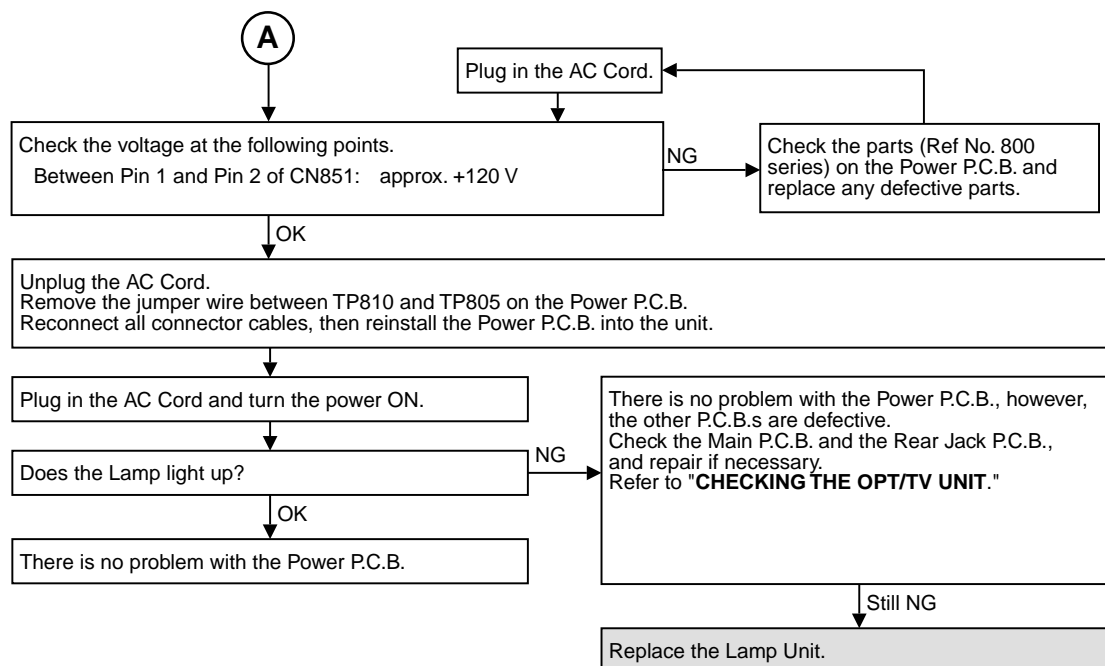
OK

NG

Check the other parts on the power P.C.B. and replace any defective parts.

Plug in the AC Cord.





## Power P.C.B. Service Position

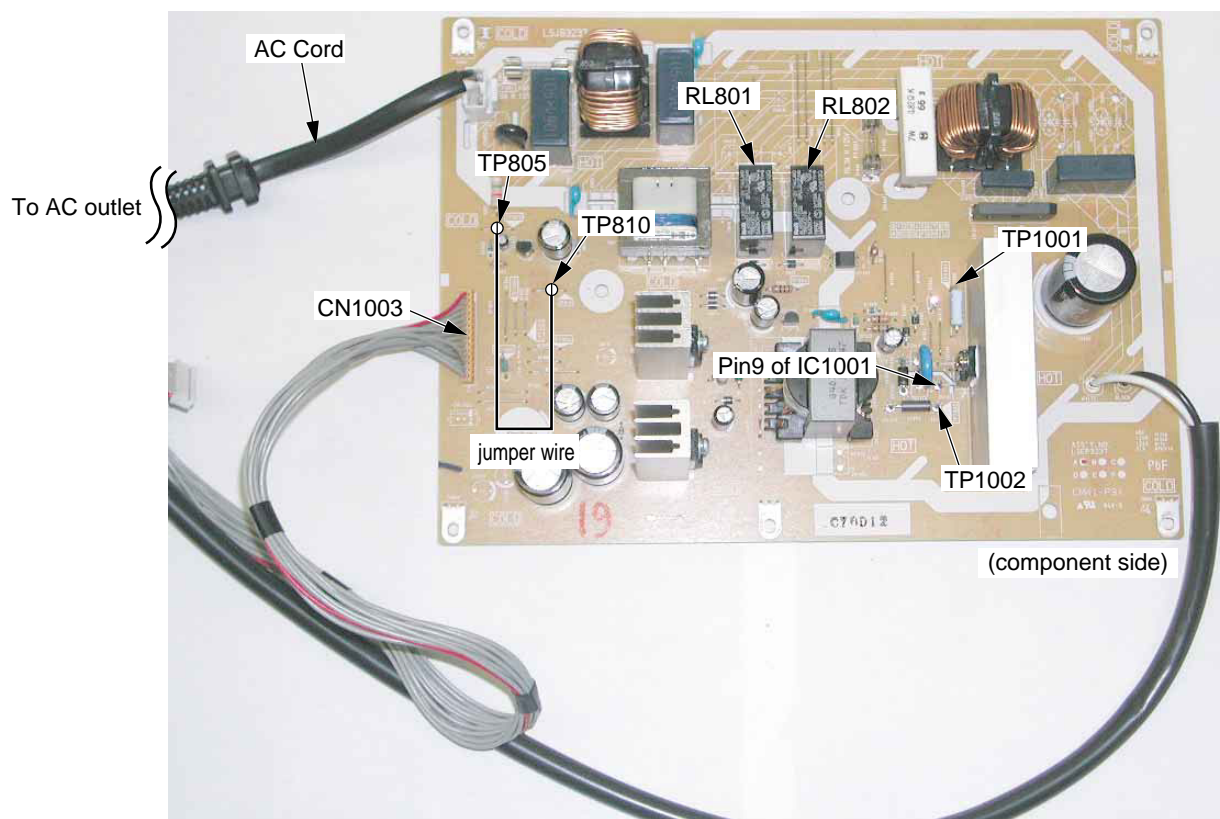


Figure 1

## CHECKING THE OPT/TV UNIT (MAIN P.C.B.)

Take out the OPT/TV Unit without the Connectors CN3502, CN4501, CN5503 and CN8201 connected. Then, remove the Main PCB Shield Case Top.

### Refer to OPT/TV Unit (Main P.C.B.) Service Position, Figure 2.

Check for short-circuit of the following points on the Main P.C.B. with the tester.

- TP1102 - GND [REG9V]
- TP1105 - GND [STBY\_7V]
- TP1106 - GND [STB3.3V]
- TP1108 - GND [STB5V]
- TP1109 - GND [SUB1.8V]
- TP1111 - GND [SUB3.3V]
- TP1113 - GND [SUB1.2V]
- TP1116 - GND [SUB5V]
- TP2007 - GND [15.5V]
- Pin 1 of CN1101 - GND [SOUN18V]
- Pin 6 of CN1101 - GND [AC\_STOP]
- Pin 7 of CN1101 - GND [REG\_30V]
- Pin 8 of CN1101 - GND [TV\_SUB\_ON]
- Pin 9 of CN1101 - GND [LCD\_17V]

Replace any defective parts on the Main P.C.B., etc.

Check the following parts on the Main P.C.B. with the tester.

- IC1103 (Pin 1) or TP1102 - TP1113
- IC1104 (Pin 1) or TP1102 - TP1111
- IC1105 (Pin 1 - Pin 2) or TP1102 - TP1109
- IC1106 (Pin 4 - Pin 5) or TP1105 - TP1108
- IC1107 (Pin 1 - Pin 2) or TP1102 - TP1116
- IC1108 (Pin 1 - Pin 5)

Replace any defective parts.

Plug in the AC Cord and turn the power ON.

Check the voltage at the following points on the Main P.C.B.

- TP1102 - GND: Approx. +9 V [REG9V]
- TP1105 - GND: Approx. +9.5 V [STBY\_7V]
- TP1106 - GND: Approx. +3.3 V [STB3.3V]
- TP1108 - GND: Approx. +5 V [STB5V]
- TP1109 - GND: Approx. +1.8 V [SUB1.8V]
- TP1111 - GND: Approx. +3.3 V [SUB3.3V]
- TP1113 - GND: Approx. +1.2 V [SUB1.2V]
- TP1116 - GND: Approx. +5 V [SUB5V]
- TP2007 - GND: Approx. +15.5V [15.5V]
- Pin 1 of CN1101 - GND: Approx. +19 V [SOUN18V]
- Pin 7 of CN1101 - GND: Approx. +30 V [REG\_30V]
- Pin 9 of CN1101 - GND: Approx. +17 V [LCD\_17V]

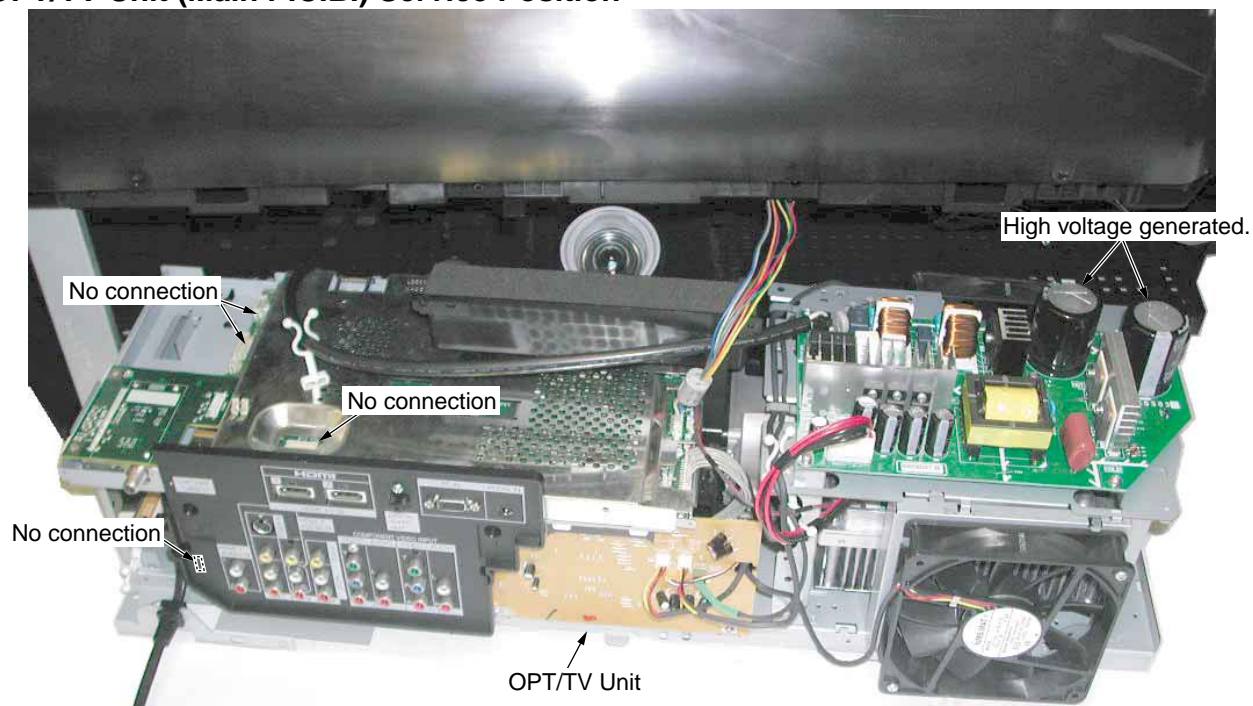
OK

There is no problem with the Main P.C.B.  
Check the other P.C.B.s and replace any defective parts.

NG

Check the other parts on the Main P.C.B. and replace any defective parts.

## OPT/TV Unit (Main P.C.B.) Service Position



## Test Points for checking the voltage on the Main P.C.B.

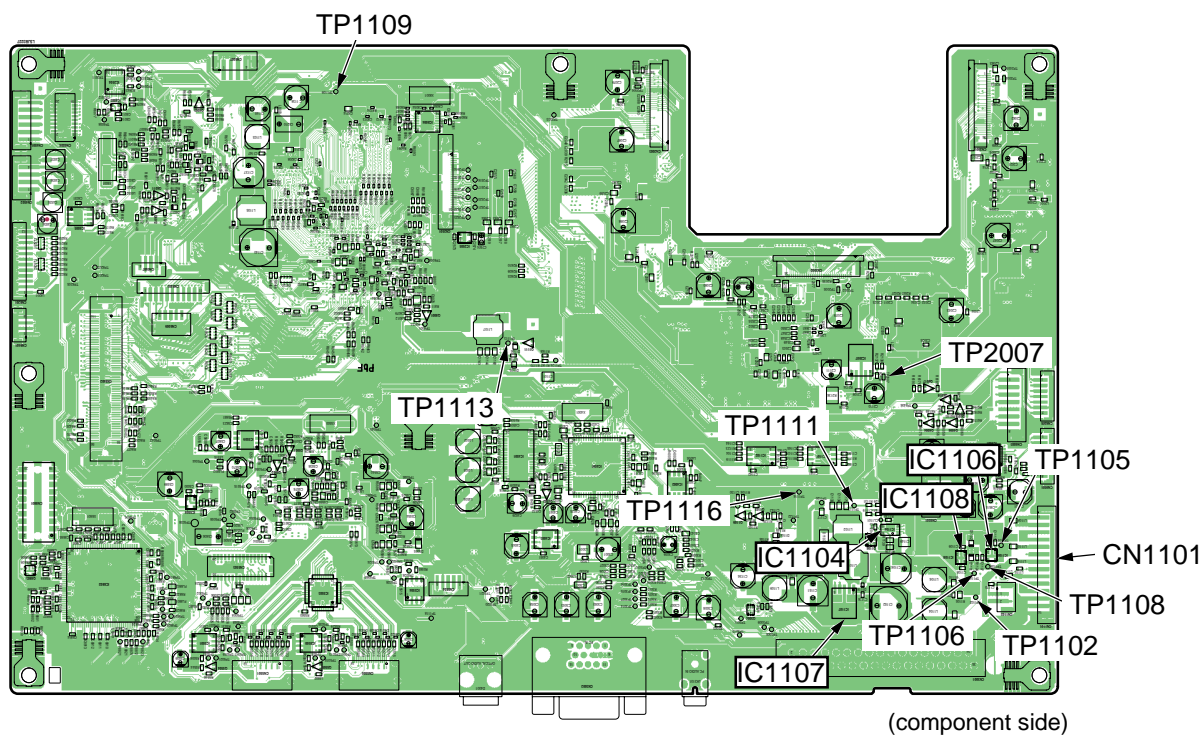


Figure 2

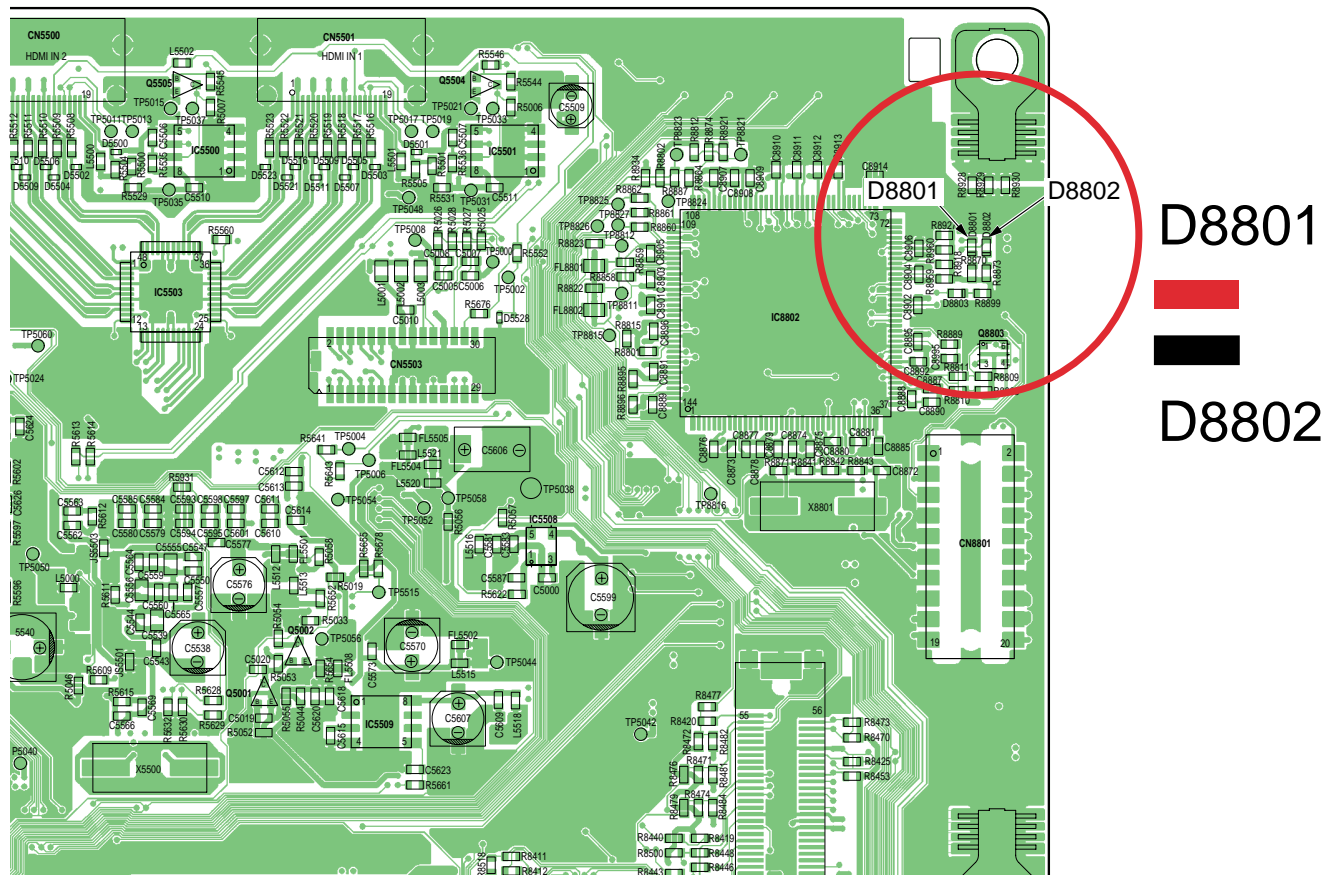
## LED on the Main P.C.B. for Digital CH

**- D8801: Sync Lock LED**

(When Sync of Digital packet (MPEG2) is locked by IC8802, it lights up in RED)

**- D8802: Error LED**

(When MPEG data has many errors (Block noise in screen), it flickers in RED. In normal condition, it is off)



**<Normal condition>**

**D8801 RED/D8802 OFF**

Circuit from Tuner through IC8802 (Front End) is working good.

**<Error condition>**

**D8801 OFF/D8802 OFF**

Possibility: Tuner or IC8802 (Demodulator) is not working.

1. Check solder first.

**D8801 ON/D8802 flickers RED**

Possibility: AGC is not working. (IC8801 or Tuner)


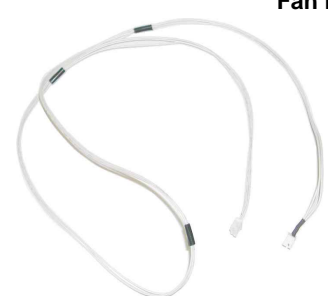


1. Check solder first.

**Note:**

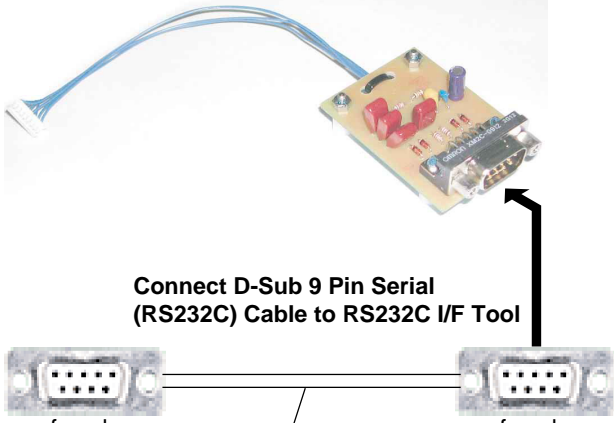


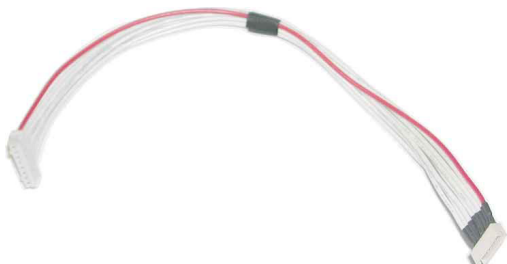
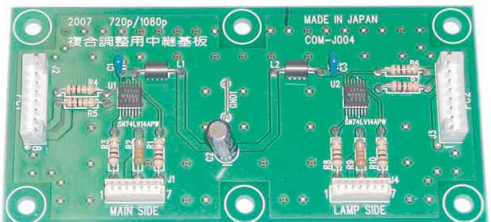
If received signal level is too low, D8801 goes off.

## 4 Service Fixture & Tools

### 4.1. Service Fixture and Tools

<p><b>LSEP3112A</b> <b>LSUA0042</b></p> <p>Relay P.C.B. (LSEP3112A)</p>  <p>LCD Panel Flat Extension Cable (LSUA0042)</p> <p><b>Note:</b> 1) 3 of each are required for servicing. 2) Extension Cable-5 which was included in the 2002 model checker can be used for Relay P.C.B. (LSEP3112A) and LCD Panel Flat Extension Cable (LSUA0042).</p>	<p><b>Relay PCB (LCD Panel)</b> <b>LCD Panel Flat Extension Cable</b></p>
<p><b>LSUA0039</b></p> <p><b>Fan Extension Cable</b></p>  <p><b>Note:</b> 4 of each are required for servicing.</p>	<p><b>LSUA0063</b></p> <p><b>7 Pin Extension Cable</b></p> 
<p><b>LSUA0065</b></p> <p><b>Thermal Fuse Defeat Cable</b></p> 	



<p><b>LSUA0043</b></p> <p><b>RS232C I/F Tool</b></p>  <p>Connect D-Sub 9 Pin Serial (RS232C) Cable to RS232C I/F Tool</p> <p>female D-Sub 9 Pin Serial (RS232C) Cable: Purchase locally</p>	<p><b>RS232C Connecting tool</b> (For 2002 models (PT-40/45LC12))</p>  <p><b>Note:</b> RS232C Connecting tool which was included in the 2002 model checker as shown above can be used for both RS232C I/F Tool (LSUA0043) and D-Sub 9 Pin Serial (RS232C) Cable.</p>
<p><b>LSUA0064</b></p> <p><b>7 Pin Extension Cable</b></p> 	<p><b>LSUA0068</b></p> <p><b>8 Pin Extension Cable</b></p> 
<p><b>LSUA0069</b></p> 	<p><b>Relay PCB (Adjustment)</b></p>



## 4.2. Service Position

### MAIN P.C.B. CHECK (1)

It is possible to check the component side of the Main P.C.B.

The following original parts are not installed:

- Rear Jack Holder
- Top Duct Unit (**Note 1**)
- Main PCB Shield Case Top

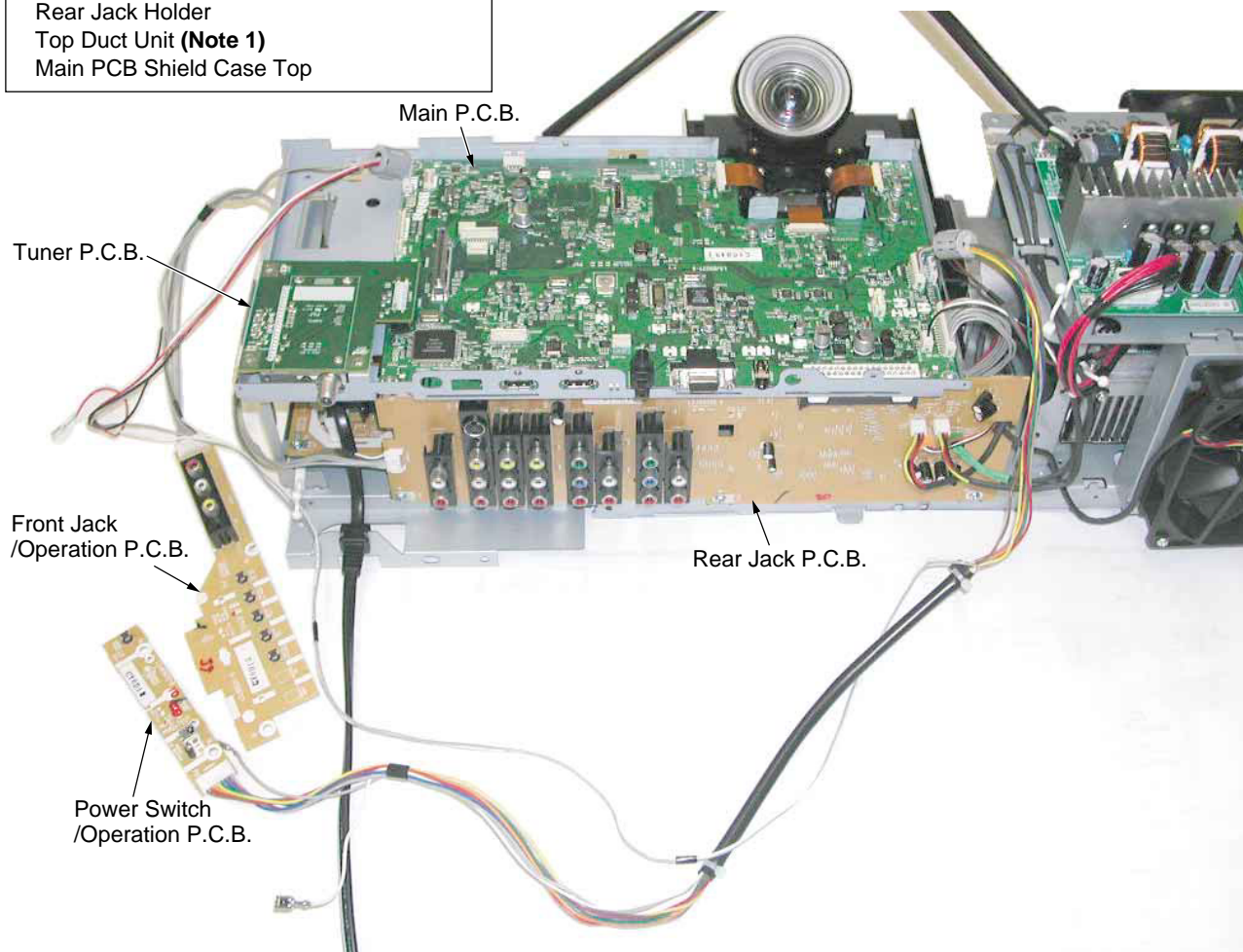


Fig. S1-1

## MAIN P.C.B. CHECK (2)

It is possible to check the foil side of the Main P.C.B./Drive P.C.B.

The following original parts are not installed:

- Rear Jack Holder
- Top Duct Unit (**Note 1**)
- Main PCB Shield Case Top

For more details, See Fig. S2-1, S2-2

**Note 2:**  
Relay PCB.s

**Note 2:**  
LCD Panel Flat  
Extension Cables

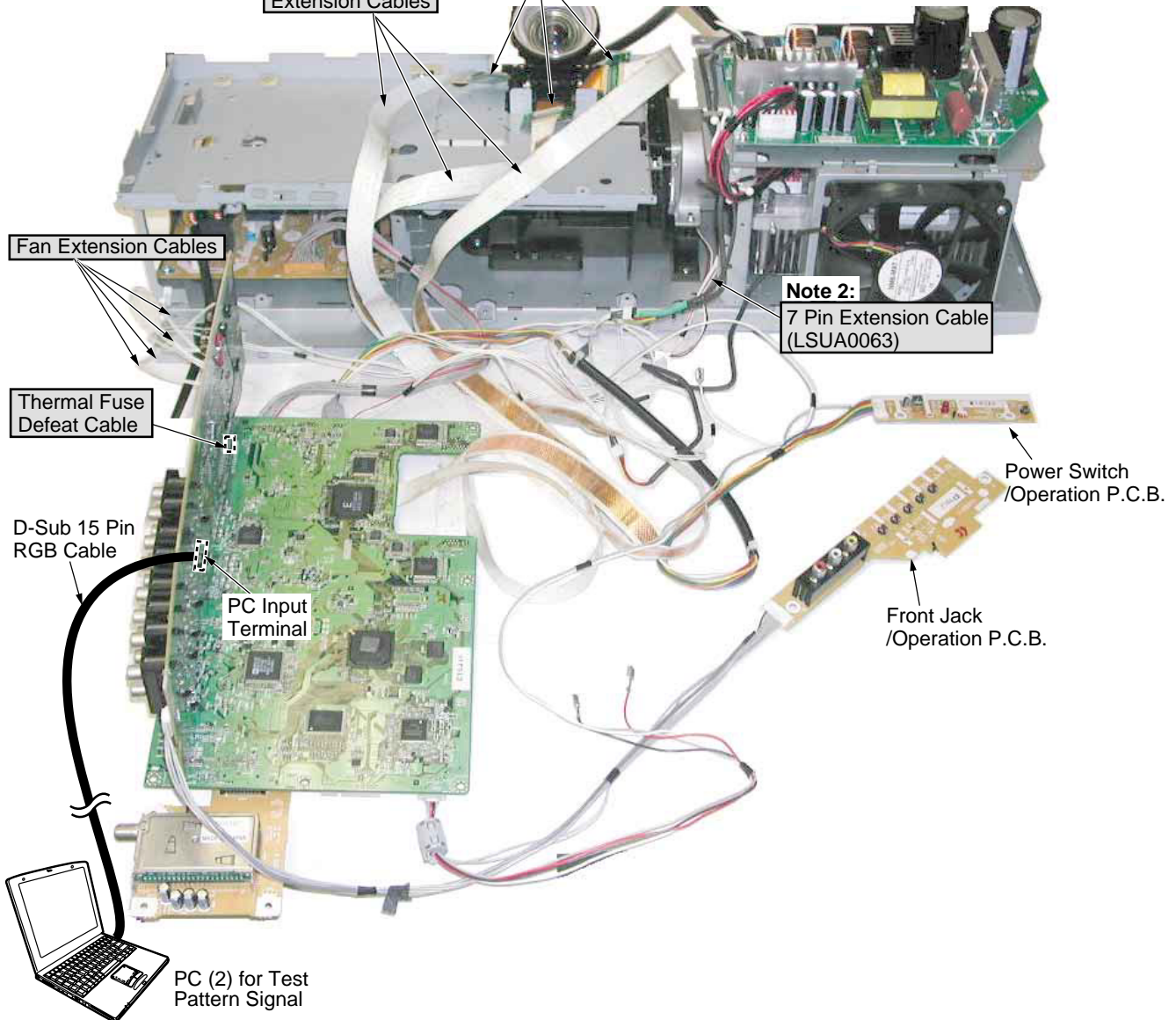


Fig. S1-2

## MAIN P.C.B. CHECK (3)

It is possible to check the component side of the Main P.C.B./Drive P.C.B.

**Note:**

Connections are the same as Fig. S2-2.

The following original parts are not installed:

- Rear Jack Holder
- Top Duct Unit (**Note 1**)
- Main PCB Shield Case Top

For more details, See Fig. S2-1, S2-2

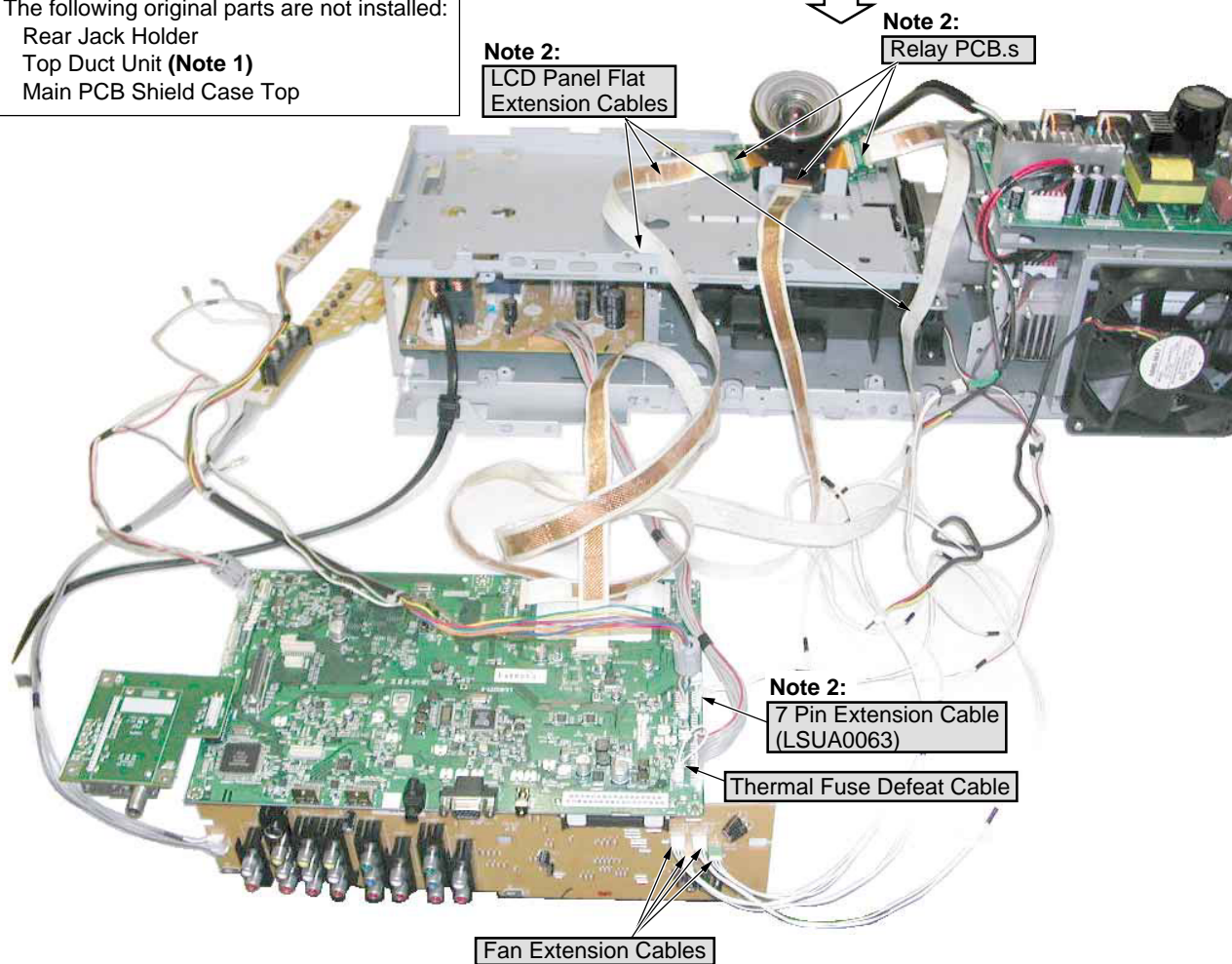


Fig. S1-3



## MAIN P.C.B. CHECK (4)

It is possible to perform the Polarizer adjustment.

**Note:**

Connections are the same as Fig. S2-3.

The following original parts are not installed:

Rear Jack Holder

Top Duct Unit (**Note 1**)

Main PCB Shield Case Top

Main PCB Shield Case Bottom

For more details, See Fig. S2-1, S2-2

**Note 3:**  
Files, etc.

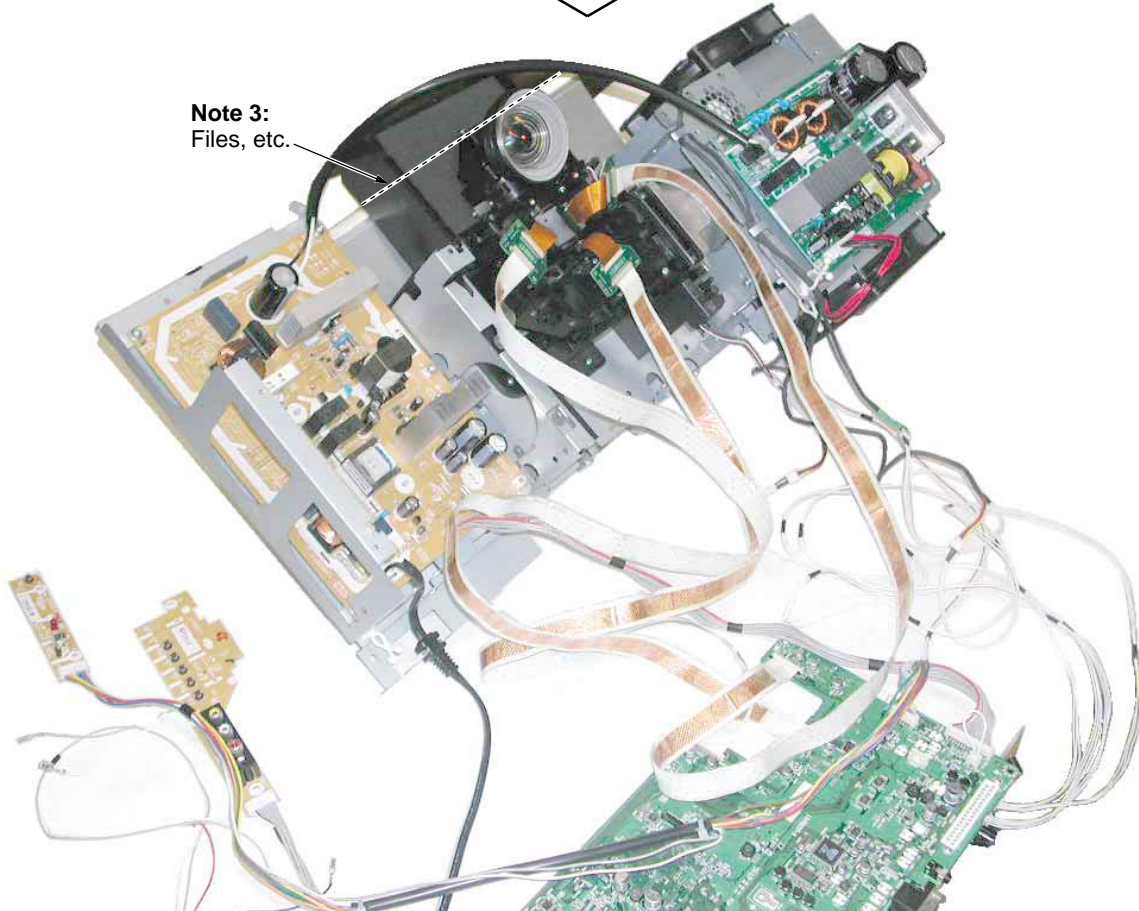
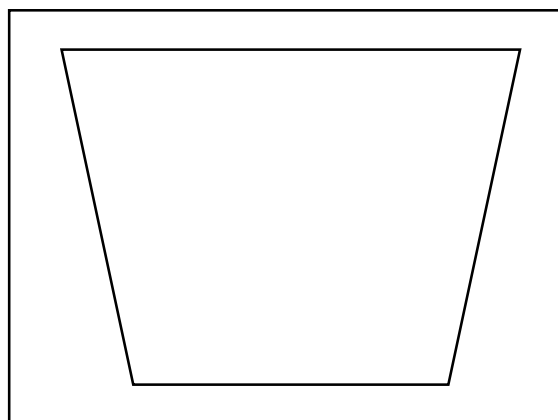
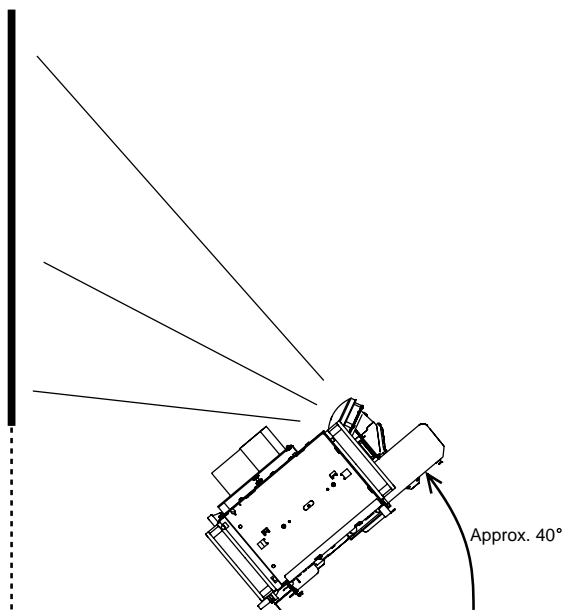


Fig. S1-4

**Note for Service Position:**

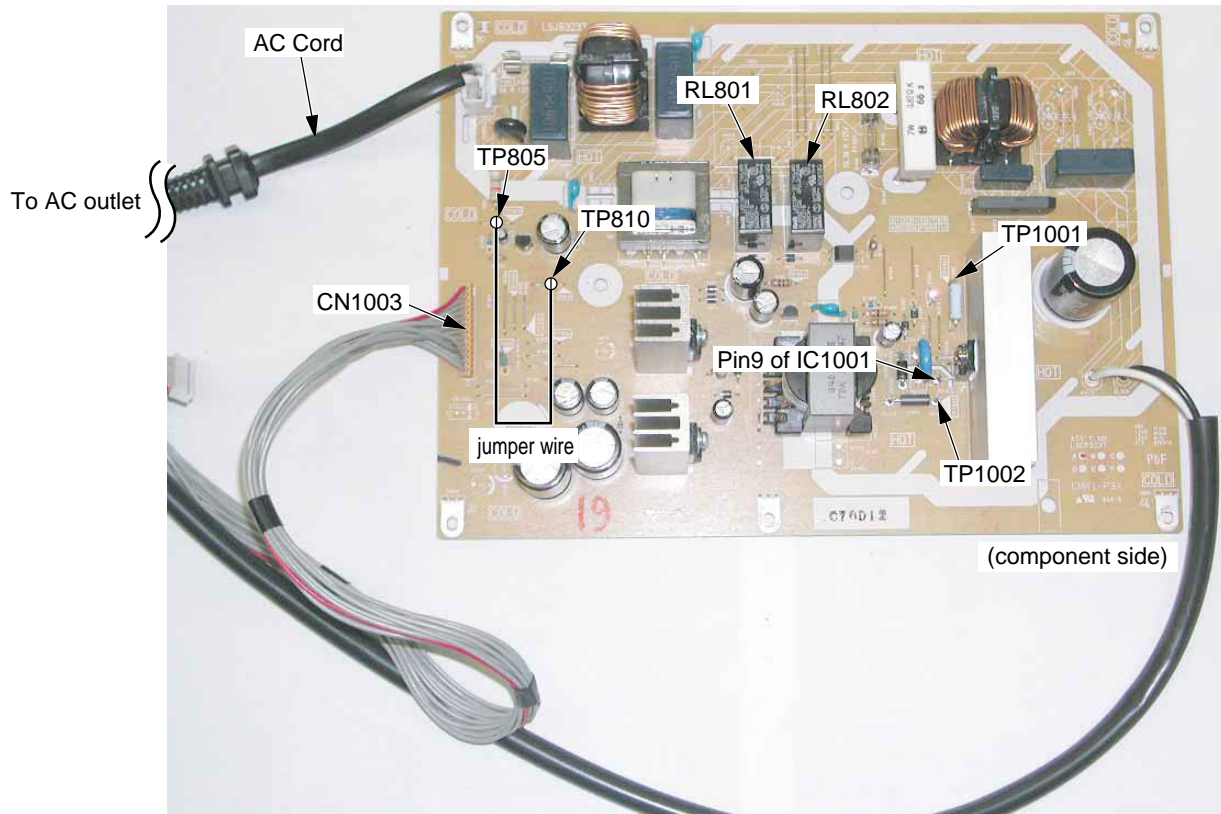
1. The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed. It is strongly recommend that it should be done in a clean room.
2. When there is no picture output, it is necessary to connect LCD Panel Flat Extension Cables (LSUA0042), Relay PCBs (LSEP3112A) and the 7 Pin Extension Cable (LSUA0063).
3. When changing the input mode, point the remote at IR receiver on the Front Jack/Operation P.C.B.
4. When performing Polarizer adjustment, project the picture onto the white screen so that the picture is within the limits of the Screen as shown.

**Mechanical Adjustment Setting****<White Screen>****<Side View>**

## POWER P.C.B. CHECK

It is possible to check the Power P.C.B. only with no load.

### Power P.C.B. Service Position



Refer to "CHECKING THE POWER P.C.B." in "Troubleshooting Hints for Component Level Repair."

**Note:**

To turn on, solder a jumper between TP810 and TP805. Then, plug in AC Cord (snap sound).

## Detailed View for Service Position

### Note:

Take care not to apply excessive pressure to the LCD Panel FPC when servicing.

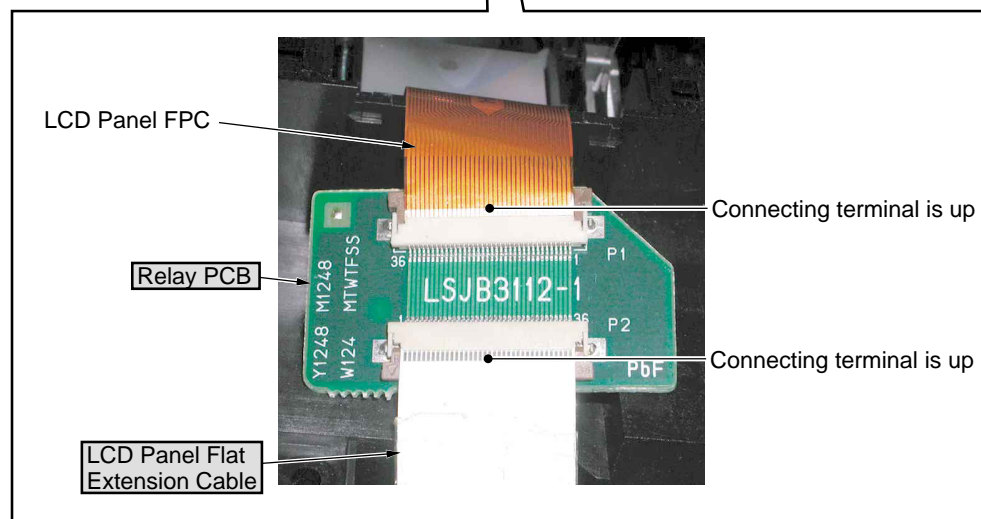
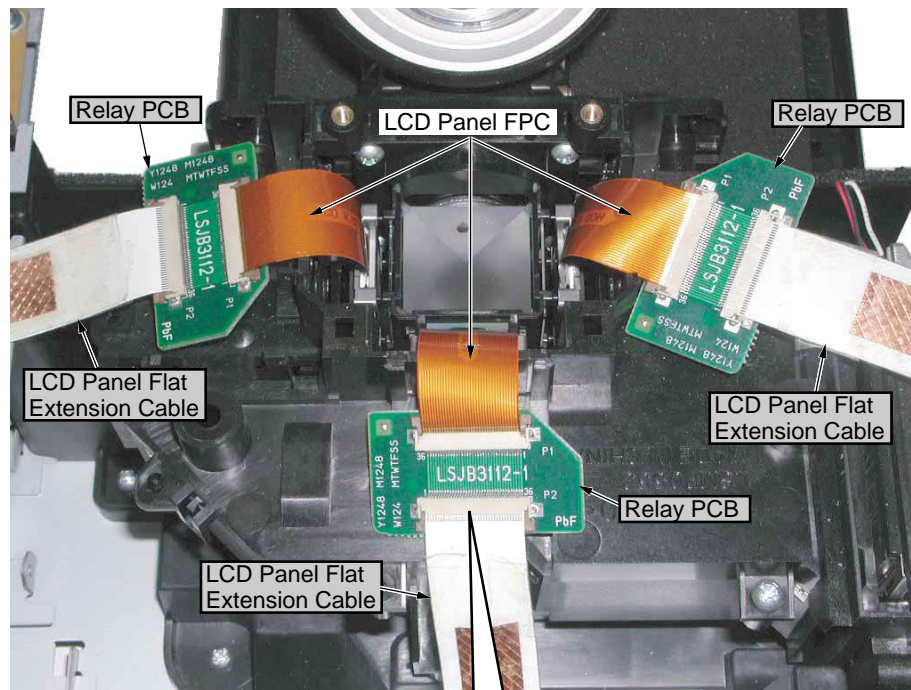


Fig. S2-1



## Detailed View for Service Position

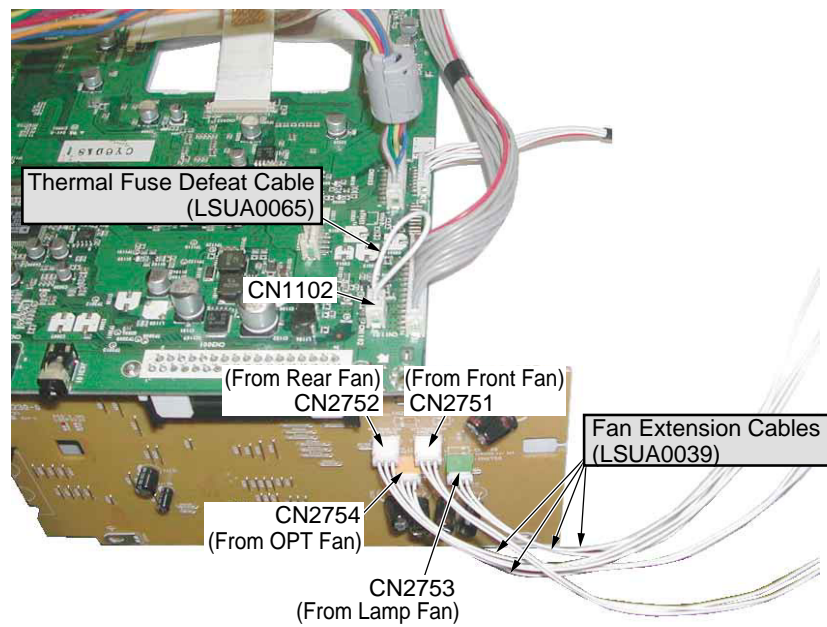
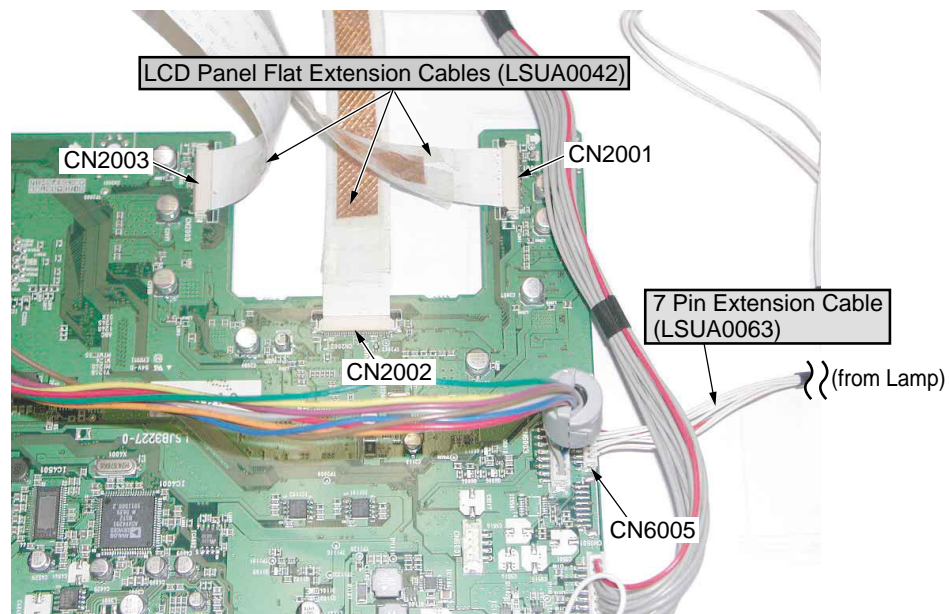


Fig. S2-2



## 4.3. Replacement Procedures for CSP (Chip Size Package) IC

### IC Location

Make sure to install IC in the correct position on the P.C.B. as shown.

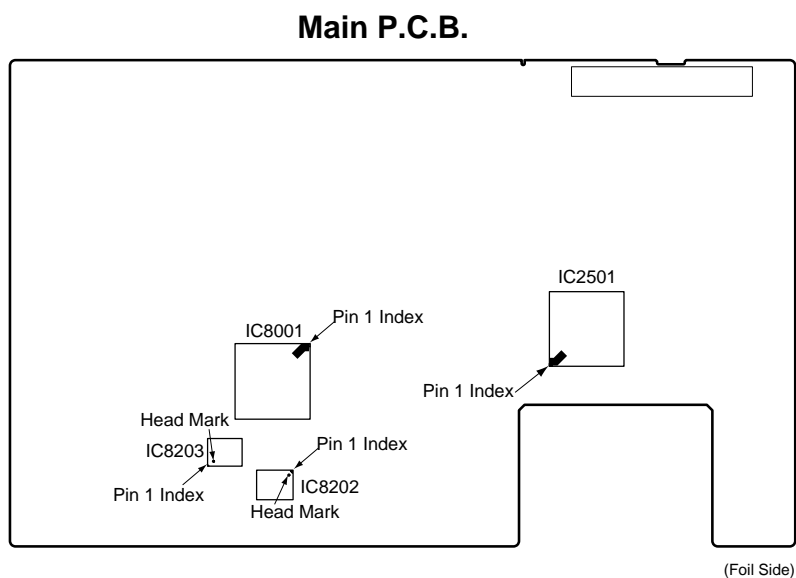
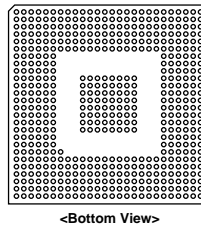


Fig. 10-1

- IC8001 (CSP IC) on the Main P.C.B.



TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

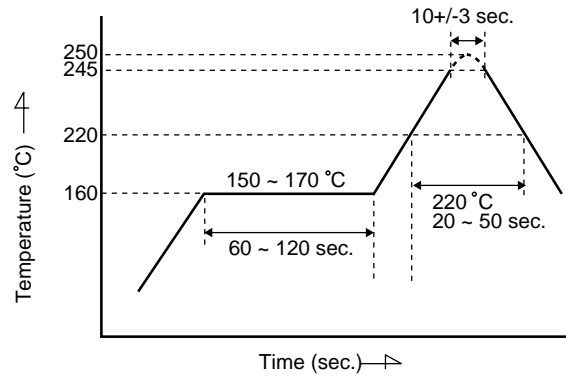
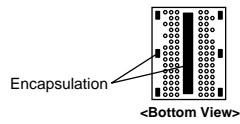


Fig. 10-3

- IC8202/IC8203 on the Main P.C.B.



TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

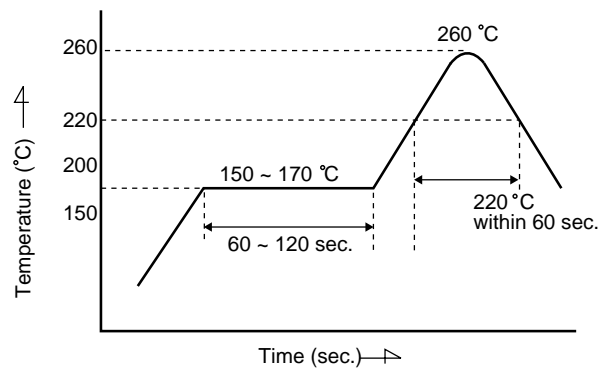


Fig. 10-4

## 5 Disassembly and Assembly Instructions

### 5.1. Optical Section

#### DISASSEMBLY METHOD FOR OPTICAL UNIT

When reassembling, perform the steps in reverse order. Bend, route and dress the wires as they were originally.

**Note :**

- Place a cloth or some other soft material under the P.C. Boards or Unit to prevent damage.
- When reinstalling, ensure that the connectors are connected firmly and electrical components have not been damaged.
- Do not supply power to the unit during disassembly and reassembly.

**Note:**

The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed. Therefore, it is strongly recommend to remove the Top Duct Unit only in a clean room.

#### REMOVAL OF THE MAIN P.C.B. FROM THE OPT/TV UNIT

- Remove the Tuner P.C.B. and the Rear Jack P.C.B. Refer to Steps 1~3 in "REMOVAL OF THE TUNER P.C.B., THE REAR JACK P.C.B. AND THE POWER P.C.B." in the service manual (Vol.1).
- Remove the Top Duct Unit by removing the 2 screws.
- Disconnect Connectors CN1101, CN1102, CN6005 and release from the clamber.
  - Open and remove the Main PCB Shield Case Top by removing the 3 screws.

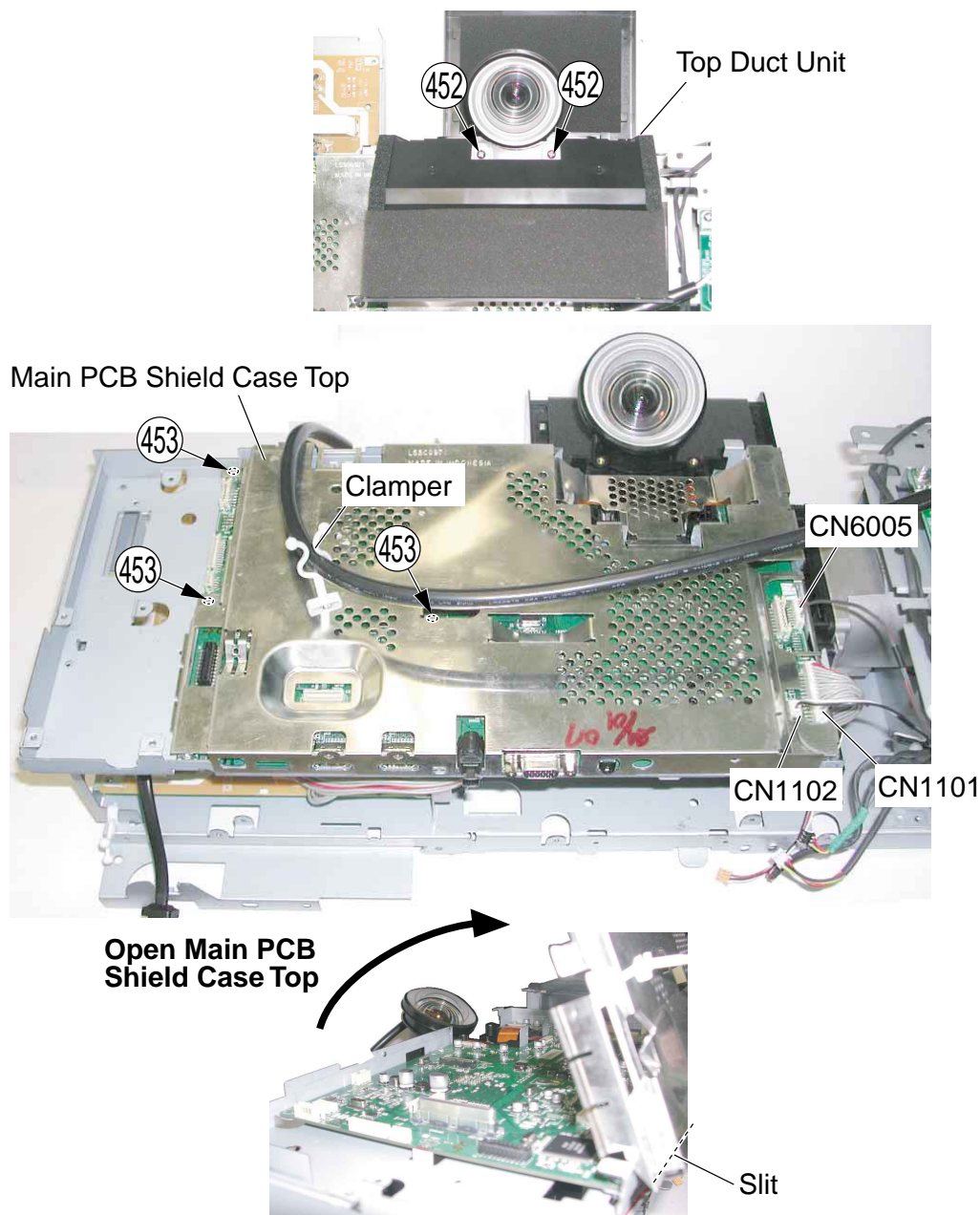


Fig. P1-1

4. Disconnect Connectors CN2001, CN2002, CN2003 (LCD Flexible Flat Cable).
5. Remove the Main P.C.B. by removing the 5 screws.

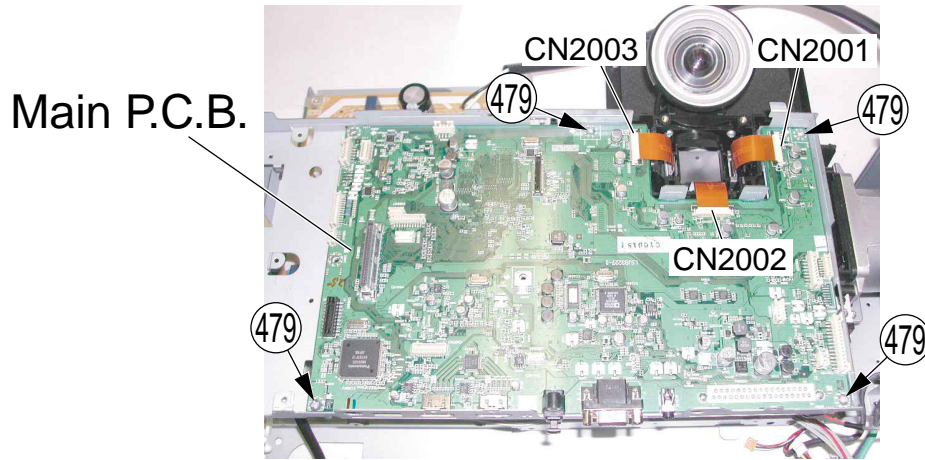


Fig. P1-2

6. Remove the Main PCB Shield Case Bottom by removing the screws.

Main PCB Shield Case Bottom

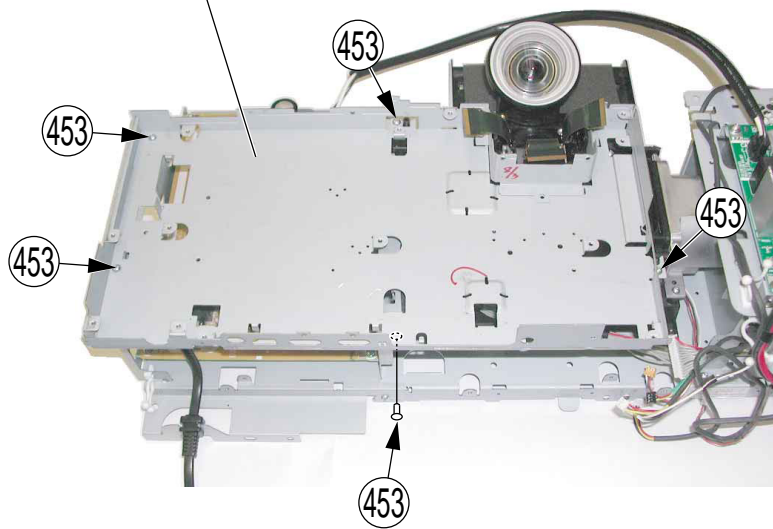


Fig. P1-3

## REMOVAL OF THE POLARIZER UNITS

1. Remove the Main PCB and the Main PCB Shield Case Bottom. Refer to Steps 1~5 in "REMOVAL OF THE MAIN P.C.B. FROM THE OPT/TV UNIT."
2. Remove the 3 Joint Piece Units.
3. Remove the Polarizer Red, Green, Blue Unit by removing the 3 Screws.

**Note:**

- a. Use extreme caution not to damage the Polarizer Units (Red, Green, Blue), when servicing.
- b. Clean the Polarizer Units if necessary. Refer to "Cleaning Methods" in Maintenance.

### Joint Piece Units

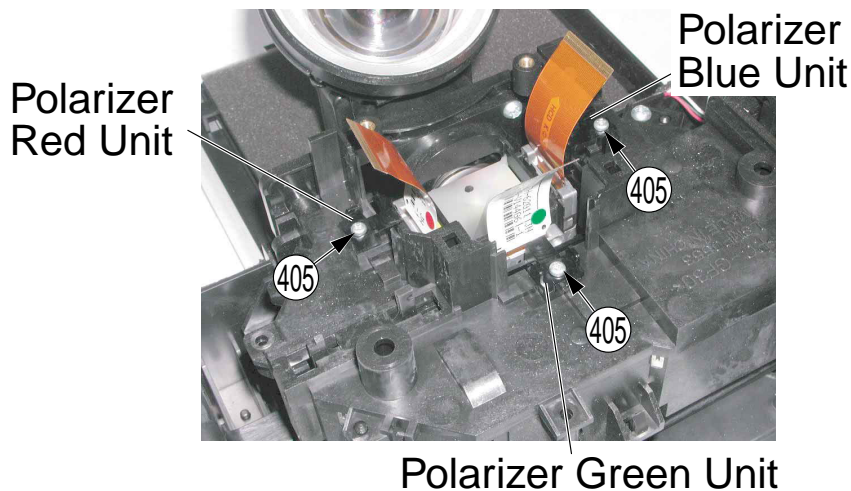
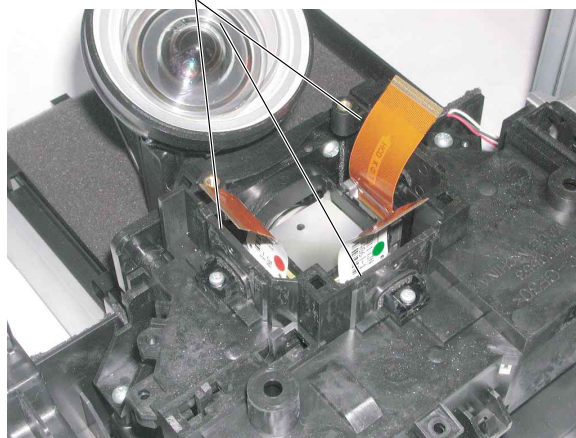


Fig. P2-1

**Reassembly Note for the Polarizer Unit (Red, Green, Blue):**

- a) After replacing the Polarizer Units, be sure to perform Polarizer Adjustment.
- b) Make sure of the mark color to distinguish the Polarizer Units.

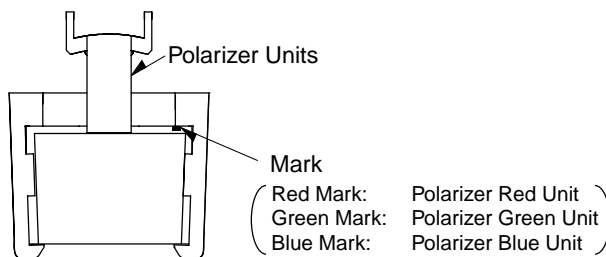


Fig. P2-2

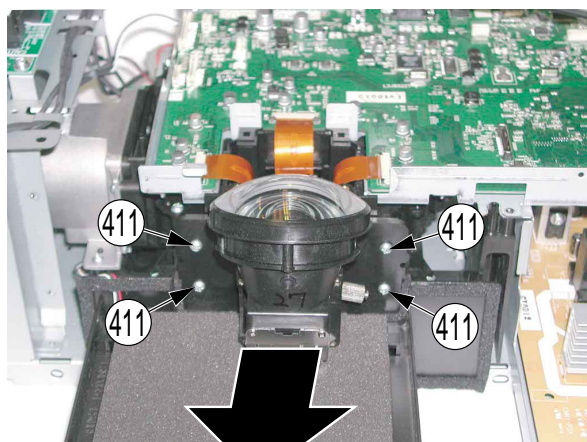
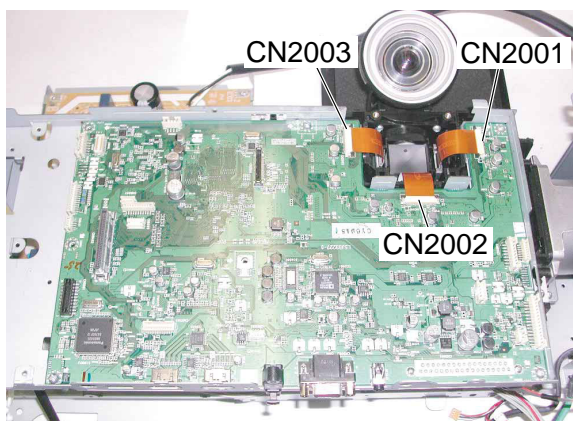


## REMOVAL OF THE OPTICAL BLOCK UNIT (Projection Lens Unit and LCD/Prism Unit)

1. Remove the Main PCB Shield Case Top. Refer to Steps 1~3 in "REMOVAL OF THE MAIN P.C.B. FROM THE OPT/TV UNIT."
2. 1) Disconnect Connectors CN2001, CN2002, CN2003 (LCD Flexible Flat Cable).  
2) Remove carefully the Optical Block Unit by removing the 4 Screws.

**Note:**

- a. Use extreme caution when handling the LCD/Prism Unit to avoid damage, dust, spots (especially fingerprints), etc.
- b. Clean the LCD/Prism Unit if necessary. Refer to "Cleaning Methods" in Maintenance.



**Remove forward**



**Optical Block Unit**  
(Projection Lens Unit and  
LCD/Prism Unit)

Fig. P3-1

**Reassembly Note for Optical Block Unit:**

1. Be sure to install the Optical Block Unit so that the Fan Case Sponge, etc. will fit properly with the Optical Block Unit.
2. Install the Optical Block Unit into the position as shown.



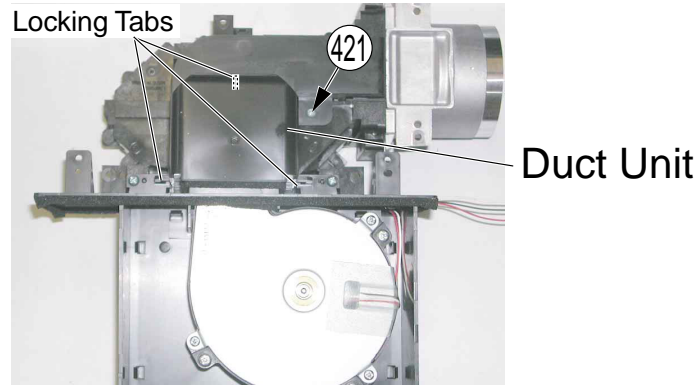
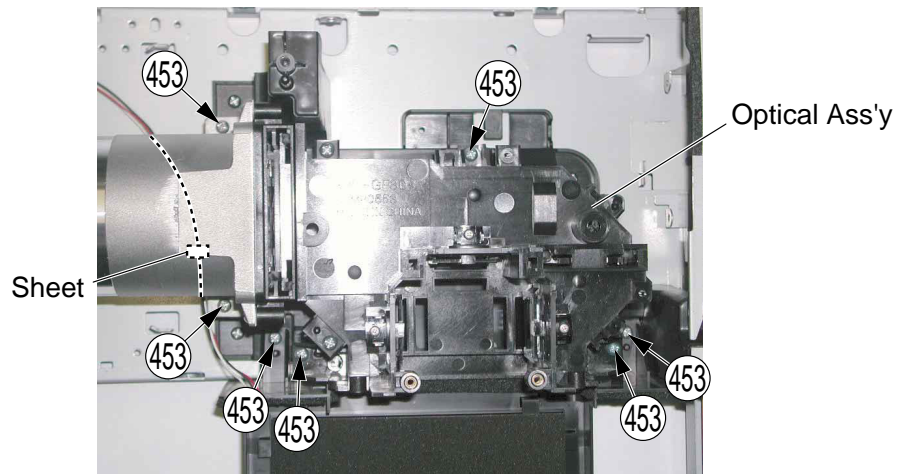
## REMOVAL OF THE FAN CASE UNIT (OPT FAN), THE P/S CONVERTER, THE INTEGRATOR 1 AND THE INTEGRATOR 2

1. Remove the Lamp Ass'y. Refer to Step d in "HOW TO REPLACE THE LAMP UNIT" in the service manual (Vol.1).
2. Remove the Optical Block Unit. Refer to Steps 1~2 in "REMOVAL OF THE OPTICAL BLOCK UNIT."
3. Remove the Optical Ass'y by removing the 7 screws and a sheet.
4. 1) Remove the screw of the Duct Unit.  
2) Remove the Duct Unit while releasing the 3 Locking Tabs.
5. Remove the Fan Case Unit from the Optical Unit by removing the 2 screws.

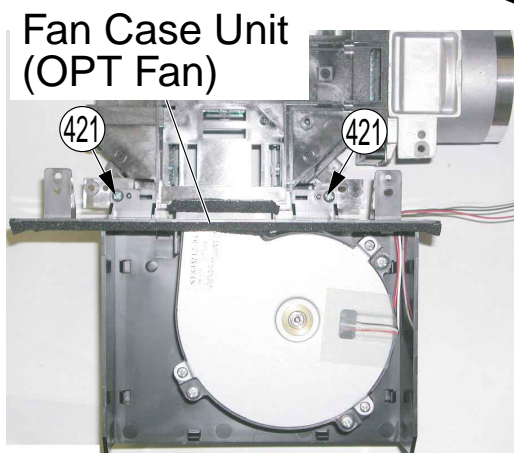
### Note:

Do not touch the Air Filter of the Fan Frame Unit.

To remove the Fan Frame Unit (Air Filter), release the 8 Locking Tabs.



<Bottom View>



<Bottom View>

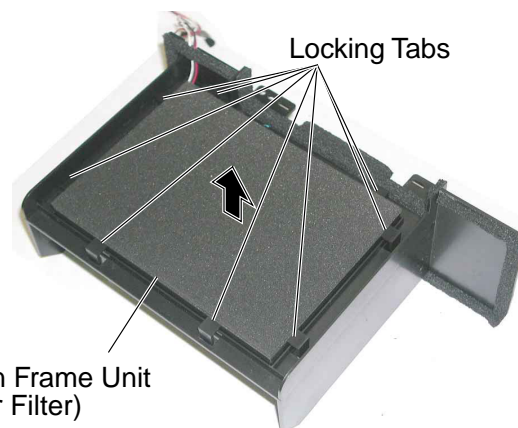


Fig. P4-1

6. Remove the Integrator Block Ass'y by removing the 4 screws.
7. 1) Remove the three Integrator 1 Springs by removing the 3 screws.  
2) Remove the Integrator 1 from the Integrator Holder Unit.
8. 1) Remove the two PS Springs by removing the 2 screws.  
2) Remove the P/S Converter by releasing the tabs of PS Holder.  
3) Remove the AL Mask.  
4) Remove the Integrator 2 by releasing the tabs of PS Holder.

**Note:**

Clean the optical components if necessary. Refer to "Cleaning Methods" in Maintenance.

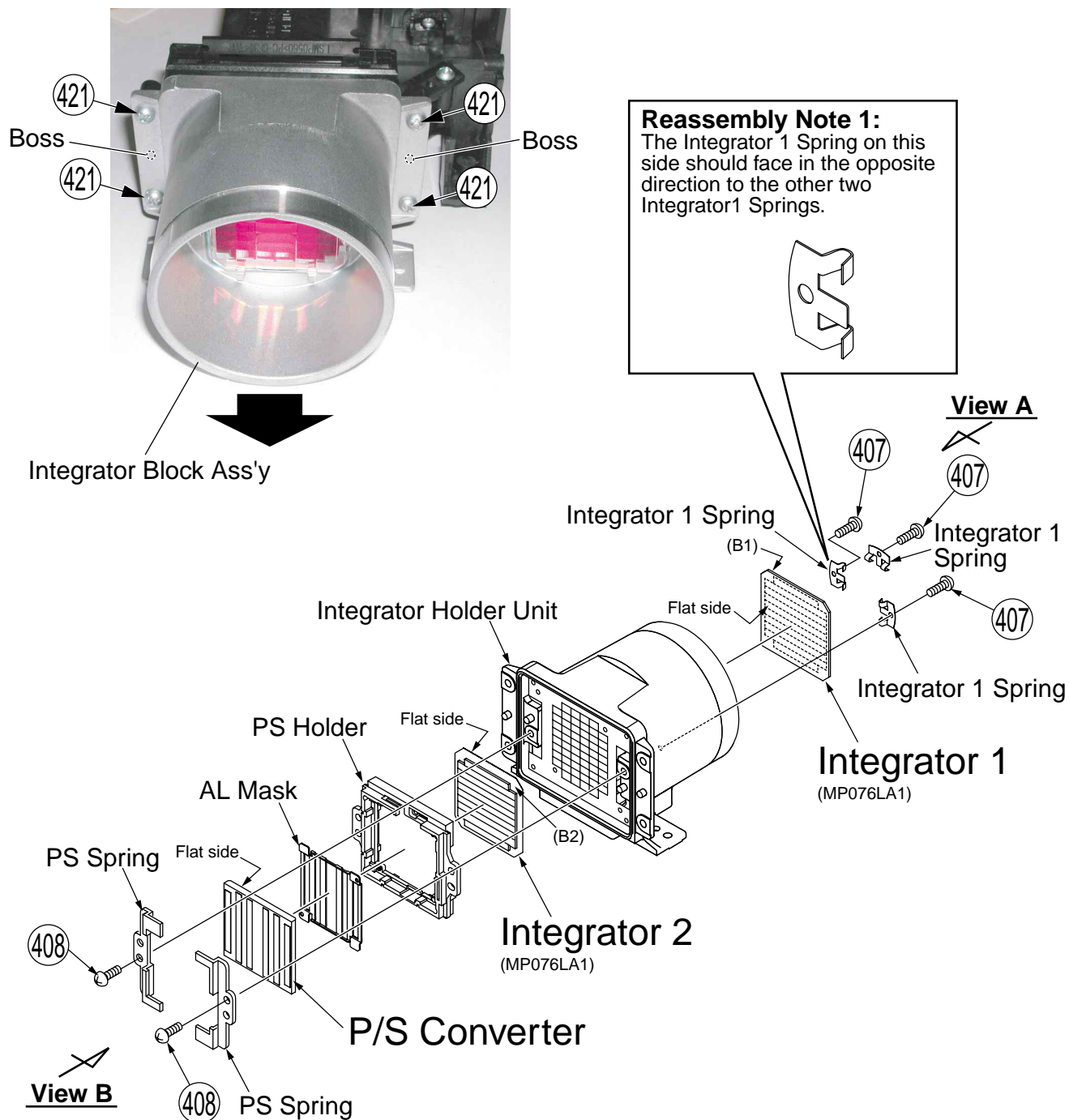
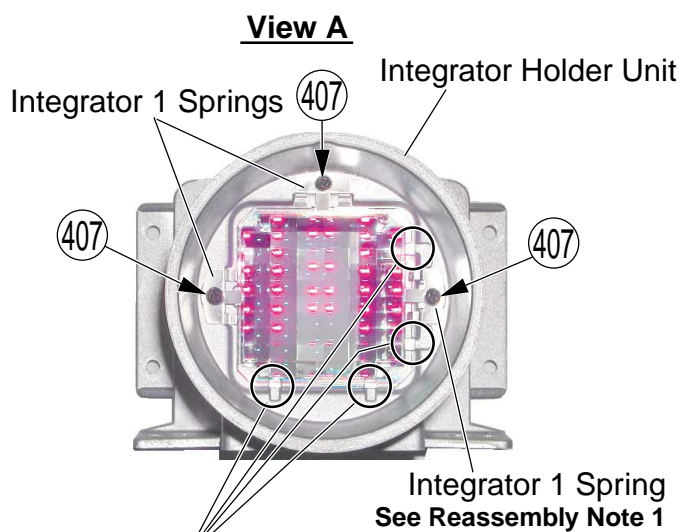


Fig. P4-2





**Reassembly Note 2:**

Move into the position so that it is touching the 4 portions.

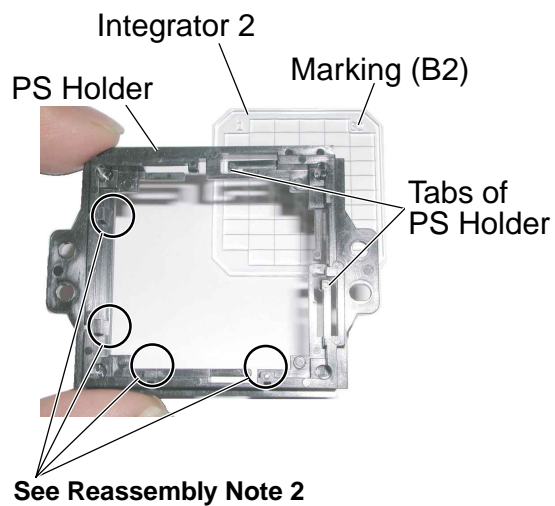
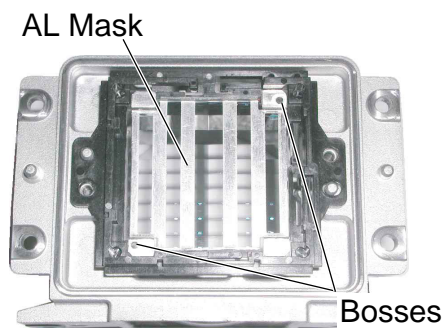
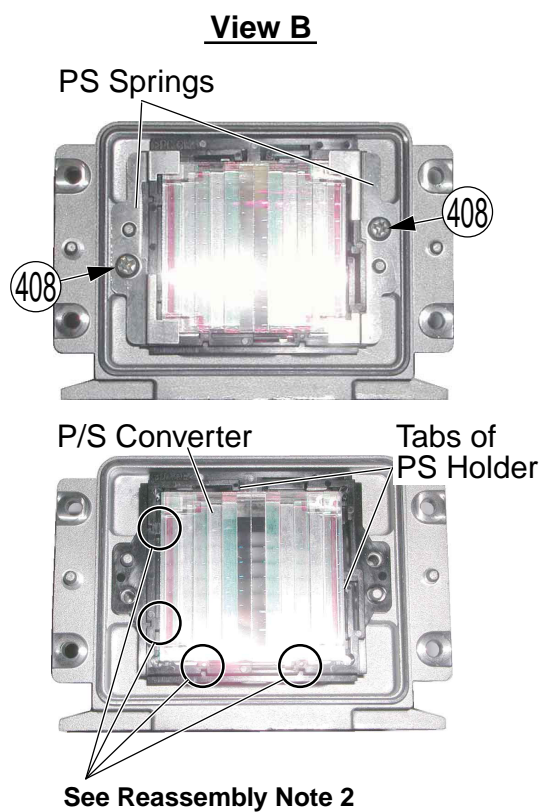
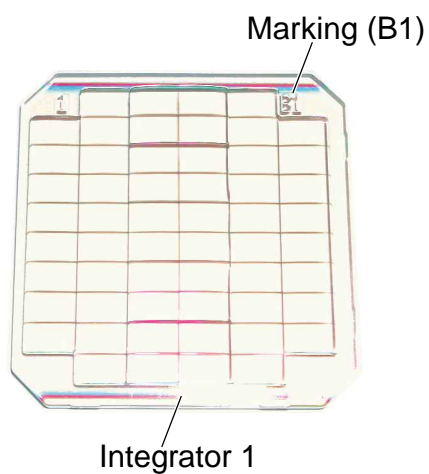


Fig. P4-3

## 6 Measurements and Adjustments



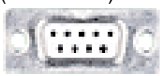
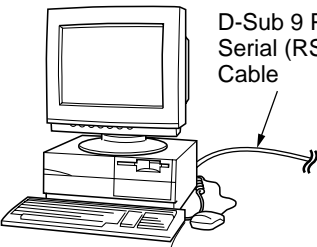

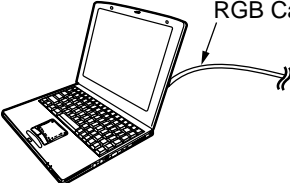
### 6.1. Adjustment Procedures 2

#### TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. Video Pattern Generator (480i/1080p)
2. Plastic Tip Driver and Non-Metal Driver
3. (+) Screwdriver and (-) Screwdriver
4. **PC REQUIREMENTS**

The following PCs and Cables are required for Service Position. Prepare the following equipment locally.

PCs	Cables	Illustration	Specification
<b>XGA Color PC Monitor</b>	<b>D-Sub 15 Pin RGB Cable</b> for connecting the DA Board  male (For Monitor P.C.B. side)	 <b>Note:</b> PC (1) can be used for monitoring.	Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher
<b>PC (1)</b> for VCOM Adjustment	<b>D-Sub 9 Pin Serial (RS232C) Cable</b> for connecting the RS232C I/F Tool (LSUA0043)  female-female	 <b>Note:</b> PC (1) must have a 10-key keyboard.	Type: Desk Top PC or with 10-key keyboard (Desk Top recommended) Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher OS: Windows <sup>®</sup> 95,98 or later Port: D-Sub 9 Pin Serial (RS232C)
<b>PC (2)</b> for Test Pattern Signal	<b>D-Sub 15 Pin RGB Cable</b> for connecting the PC Input Terminal  male-male		Type: Notebook PC recommended OS: Windows <sup>®</sup> 95,98 or later Port: RGB output

5. Test Pattern Signal : testptnmmd2002.exe
6. Application Software for VCOM Adjustment:  
2007\_1080P folder (33 files)

## INPUT TERMINAL INFORMATION

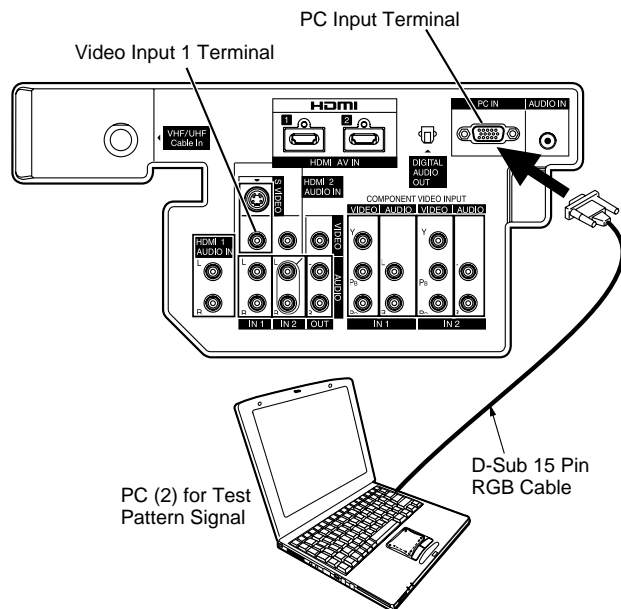


Fig. E1

## CONTRAST ADJUSTMENT (Automatic Adjustment)

### Note:

When replacing the EEPROM IC (IC8201), perform this adjustment.

1. Enter the Service Adjust Mode. Then, press 1 key once on the remote to enter ADJUST 1/4 screen.
2. Connect the Video Pattern Generator to the Video Input 1 Terminal and supply Gray Scale Pattern Signal (10 scales).
3. Set to Video 1 mode by pressing TV/VIDEO key on the remote.

Gray Scale Pattern Signal (10 scales)



<ADJUST 1/4>

4. Press OK key on the remote for 3 seconds. The value will be red while adjusting.
5. Confirm that the value is not "NG."
6. Connect the Video Pattern Generator to the Component 1 Terminal and supply Gray Scale Pattern Signal (10 scales).
7. Set to Component 1 mode by pressing TV/VIDEO key on the remote.
8. Press OK key on the remote for 3 seconds. The value will be red while adjusting.

Gray Scale Pattern Signal (10 scales)

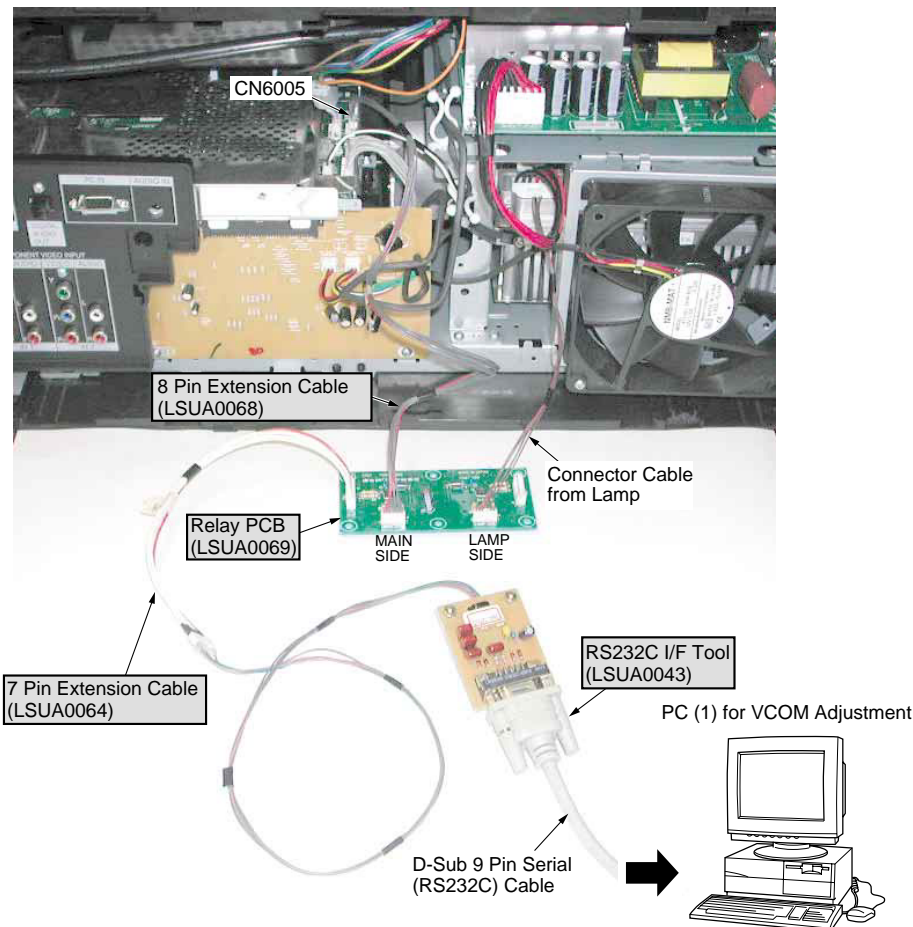


<ADJUST 1/4>

9. Confirm that the value is not "NG."
10. After adjustment, turn off the power.

**SET UP for VCOM Adjustment:**

1. 1) Remove the Rear Cover Unit.
- 2) Disconnect Connector CN6005 on the Main P.C.B.
- 3) Connect Connector CN6005 and PC (1) with the 8 Pin Extension Cable, the 7 Pin Extension Cable, the Relay PCB, the RS232C I/F Tool, the D-Sub 9 Pin Serial (RS232C) Cable.

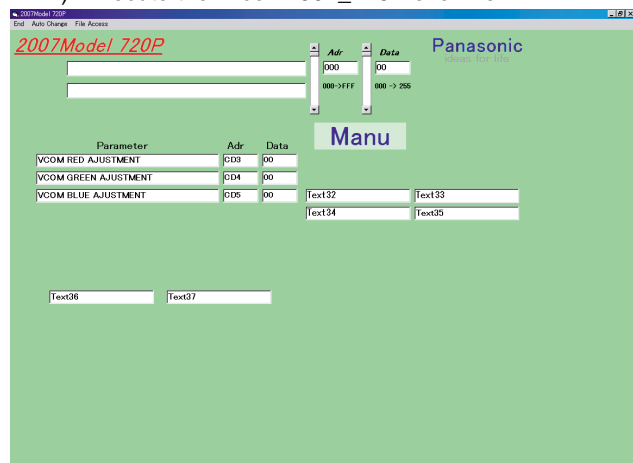


2. Install the software for VCOM adjustment into the PC (1).

**Note:**

The PC (1) must have a 10-key keyboard.

- 1) Copy the "2007\_720P (33 files)" folder to C: Drive.
- 2) Execute the "Vcom2007\_720P.exe" file.

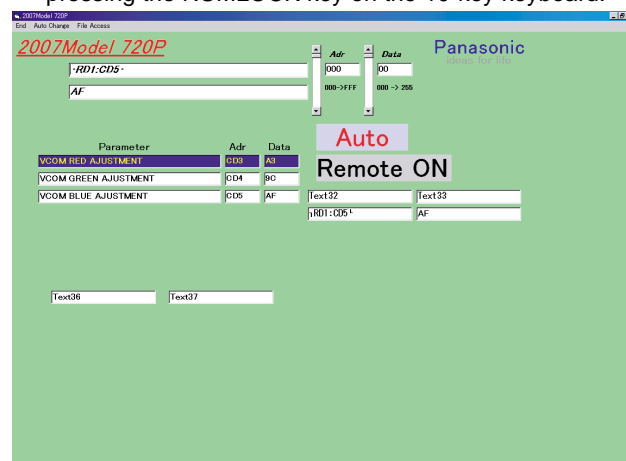


3. Turn on the unit power.

4. To turn the remote on, press DEL key.  
"Manu" indication will change to "Auto" indication, and "Remote ON" indication will appear.

**Note:**

Confirm NUMLOCK is on. If not, turn on NUMLOCK by pressing the NUMLOCK key on the 10-key keyboard.



5. Perform the VCOM Adjustment.
6. After completing adjustments, turn the remote off by pressing DEL key. Then, end the software.

## VCOM ADJUSTMENT

### Purpose:

To set the optimum LCD common voltage.

### Symptom of Misadjustment:

The picture will be flickering.

TP	ADJ.	INPUT
	Vcom R Adjust	(PC Input Terminal) 70 % Red Horizontal Signal
	Vcom G Adjust	(PC Input Terminal) 70 % Green Horizontal Signal
	Vcom B Adjust	(PC Input Terminal) 70 % Blue Horizontal Signal
EQUIPMENT		SPECIFICATION
PC(2), Test Pattern Signal or PC with video graphics card		Refer to Description below

### Note:

This method is for use with PC which has a 720p video graphics card to output the Test Pattern Signal.

### Test Pattern Signal:

- 70 % Red Horizontal Signal: "2 Red 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Green Horizontal Signal: "3 Green 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Blue Horizontal Signal: "4 Blue 70 %" in "2 Horizontal" of "3 Phase"

### SET UP:

1. Connect the PC(2) to the PC Input Terminal with the RGB Cable.

#### Note:

PC output should be **720p resolution**.

A Desk Top PC with a video graphics card compatible with 1080p resolution must be used.

2. Set to PC mode by pressing TV/VIDEO key on the remote.

### PROCEDURES:

1. Supply 70% Red Horizontal signal.
2. Select "VCOM RED ADJUSTMENT" in menu.
3. Adjust "VCOM RED ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that there are no flicker on the whole screen.
4. Supply 70% Green Horizontal signal.
5. Then, select "VCOM GREEN ADJUSTMENT" in software menu by 2(↓) or 8(↑) key on the 10-key keyboard.
6. Adjust "VCOM GREEN ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
7. Supply 70% Blue Horizontal signal.
8. Then, select "VCOM BLUE ADJUSTMENT" in software menu by 2(↓) or 8(↑) key on the 10-key keyboard.
9. Adjust "VCOM BLUE ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
10. End the software.
11. Turn off the unit power.

## WHITE BALANCE ADJUSTMENT

### Note:

- Be sure to perform the White Balance Adjustment after the power has been on for more than 10 minutes so that color temperature is stable.
- This adjustment should be done in a darkroom.

### Purpose:

To set the standard white level for each color temperature.

### Symptom of Misadjustment:

The white color of picture will become bluish or reddish.

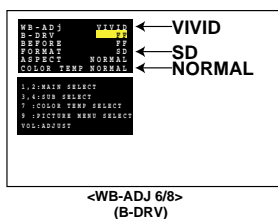
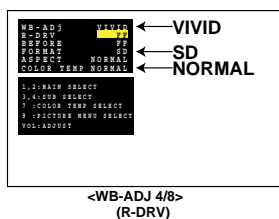
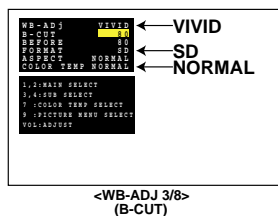
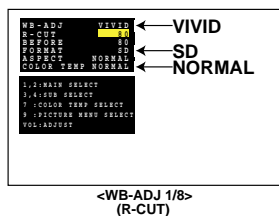
TP	ADJ.	INPUT
	R-CUT B-CUT R-DRV B-DRV	(COMPONENT Terminal) Gray Scale Pattern Signal (10 or 16 scales) and (PC Input Terminal) Gray Scale Pattern Signal (16 scales)
EQUIPMENT		SPECIFICATION
Video Pattern Generator (480i/720p), or PC with video graphics card, Test Pattern Signal		Refer to Description below

### SET UP : (SD signal)

- Connect the Video Pattern Generator (480i signal) to the Component Input Terminal.
- Set to Component mode by pressing TV/VIDEO key on the remote.
- Supply Gray Scale Pattern Signal (480i signal).
- Enter the Service Adjust Mode by pressing VOL DOWN button and RECALL key (3 times).
- Select WB-ADJ 1/8 screen (R-CUT) by pressing 1 key or 2 key.
- Set the following setting in WB-ADJ 1/8 screen (R-CUT), WB-ADJ 3/8 screen (B-CUT), WB-ADJ 4/8 screen (R-DRV) and WB-ADJ 6/8 screen (B-DRV).
  - WB-ADJ: VIVID
  - FORMAT: SD
  - COLOR TEMP: NORMAL

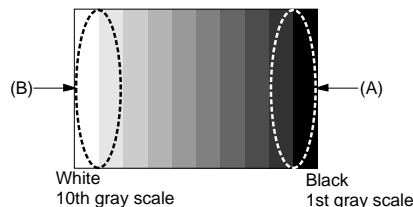
### Note:

Before adjusting, memorize the default values of R-CUT, B-CUT, R-DRV and B-DRV in Service Adjust Mode.



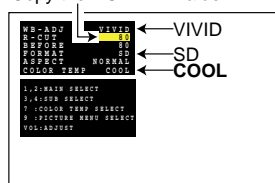
- Adjust R-CUT and B-CUT by pressing VOL+ or VOL - key so that the area around (A) becomes pure gray with no red or blue tint.
- Adjust R-DRV and B-DRV by pressing VOL+ or VOL - key so that the area around (B) becomes pure gray with no red or blue tint.

Gray Scale Pattern Signal (10 scales)

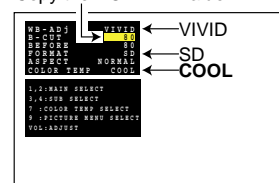


- Set COLOR TEMP to COOL by pressing 7 key.
- Copy the NORMAL values which were adjusted in steps 1, 2.

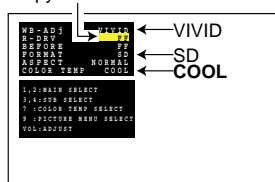
Copy the NORMAL value



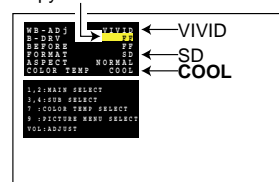
Copy the NORMAL value



Copy the NORMAL value

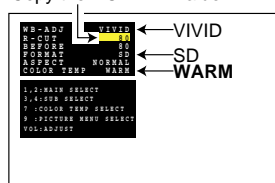


Copy the NORMAL value

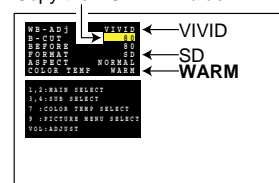


- Set COLOR TEMP to WARM by pressing 7 key.
- Copy the NORMAL values which were adjusted in steps 1, 2.

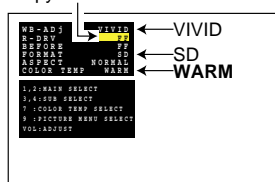
Copy the NORMAL value



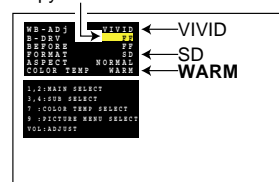
Copy the NORMAL value



Copy the NORMAL value



Copy the NORMAL value

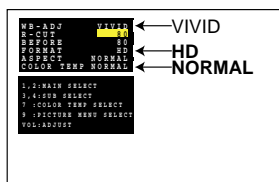
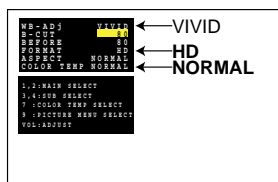
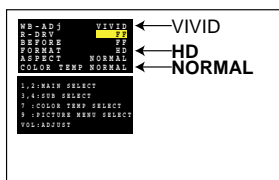
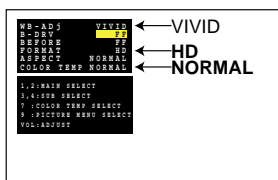




**(HD signal)****Note:**

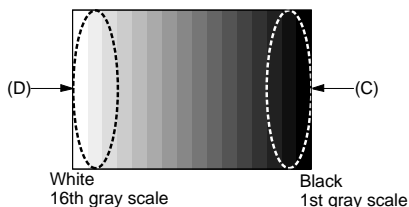
This method is for use with PC which has a 720p video graphics card to output the Test Pattern Signal.

7. Connect the PC to the PC Input Terminal with the RGB Cable.
8. Set to PC mode by pressing TV/VIDEO key on the remote.
9. Supply Gray Scale Pattern Signal (720p signal) from PC.
10. Set the following setting in WB-ADJ 1/8 screen (R-CUT), WB-ADJ 3/8 screen (B-CUT) and WB-ADJ 4/8 screen (B-DRV).
- WB-ADJ: VIVID (no change)
- FORMAT: SD
- COLOR TEMP: NORMAL

<WB-ADJ 1/8>  
(R-CUT)<WB-ADJ 3/8>  
(B-CUT)<WB-ADJ 4/8>  
(R-DRV)<WB-ADJ 6/8>  
(B-DRV)

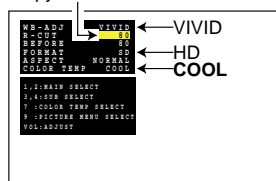
11. Adjust R-CUT and B-CUT by pressing VOL+ or VOL - key so that the area around (C) becomes pure gray with no red or blue tint.
12. Adjust R-DRV and B-DRV by pressing VOL+ or VOL - key so that the area around (D) becomes pure gray with no red or blue tint.

Gray Scale Pattern Signal (16 scales)

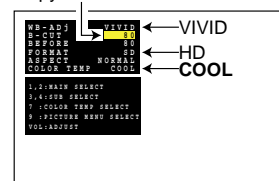


13. Set COLOR TEMP to COOL by pressing 7 key.
14. Copy the NORMAL values which were adjusted in steps 11, 12.

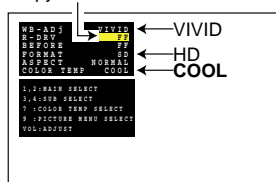
Copy the NORMAL value

<WB-ADJ 1/8>  
(R-CUT)

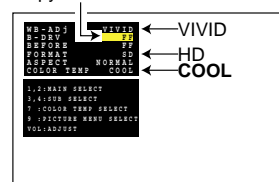
Copy the NORMAL value

<WB-ADJ 3/8>  
(B-CUT)

Copy the NORMAL value

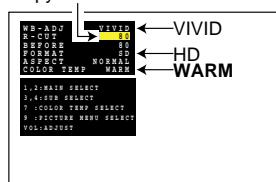
<WB-ADJ 4/8>  
(R-DRV)

Copy the NORMAL value

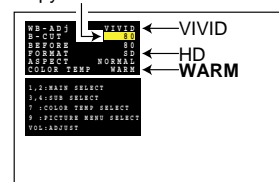
<WB-ADJ 6/8>  
(B-DRV)

15. Set COLOR TEMP to WARM by pressing 7 key.
16. Copy the NORMAL values which were adjusted in steps 11, 12.

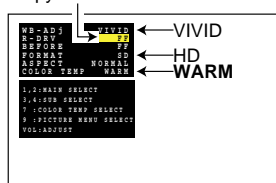
Copy the NORMAL value

<WB-ADJ 1/8>  
(R-CUT)

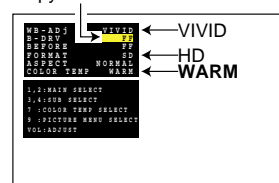
Copy the NORMAL value

<WB-ADJ 3/8>  
(B-CUT)

Copy the NORMAL value

<WB-ADJ 4/8>  
(R-DRV)

Copy the NORMAL value

<WB-ADJ 6/8>  
(B-DRV)

17. Confirm the screen with COLOR TEMP NORMAL/COOL/ WARM of SD and HD.
- If NG, repeat steps 1~16.
- If OK, the adjustment is complete.

## POLARIZER ADJUSTMENT (Mechanical Adjustment)

### Purpose:

To set the polarizer in the proper position.

### Symptom of Misadjustment:

The picture will become bluish or reddish or greenish.

TP	ADJ.	INPUT
	Polarizer Green Polarizer Red Polarizer Blue	No signal input (Black screen is displayed.) ( <b>SET UP 1</b> ) or (PC Input Terminal) Black Signal ( <b>SET UP 2</b> ) or (VIDEO Input 1 Terminal) Black Signal ( <b>SET UP 3</b> )
EQUIPMENT		SPECIFICATION
Screwdriver (+), PC(2), Test Pattern Signal, (Video Pattern Generator)		Refer to Description below

### Note:

This adjustment should be done in a darkroom.

### Test Pattern Signal:

- Black Signal: "8 Black" in "1 Color"

### SET UP 1:

1. Place the unit into Service Position.
2. Set to a desired mode except TV mode by pressing TV/VIDEO key on the remote.
3. No signal input.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

### SET UP 2:

1. Place the unit into Service Position.
2. Connect the PC (2) to the PC Input Terminal with the RGB cable.
3. Supply Black Signal and set to PC mode by pressing TV/VIDEO key on the remote.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

### SET UP 3:

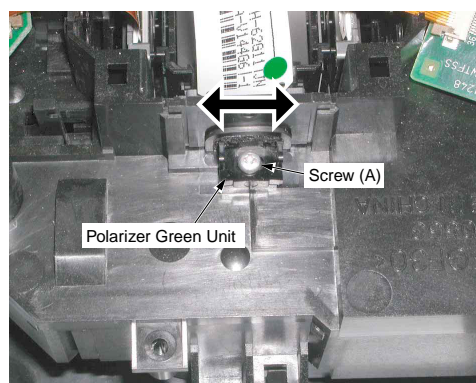
1. Place the unit into Service Position.
2. Connect the NTSC Video Pattern Generator to the VIDEO Input 1 Terminal.
3. Supply Black Signal and set to VIDEO 1 mode by pressing TV/VIDEO key on the remote.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

### Note:

Confirm that the picture will become black (not become bluish or reddish or greenish) after adjustment.

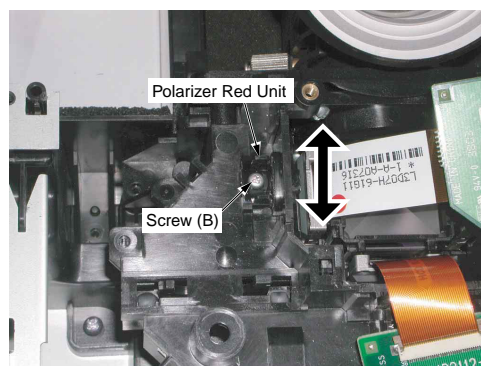
## POLARIZER GREEN ADJUSTMENT

1. Loosen a Screw (A) of the Polarizer Green Unit.
2. Move the Polarizer Green Unit to the right and left so that there is no green tint on the whole screen, and then tighten a Screw (A) (30+/-10 N·cm).



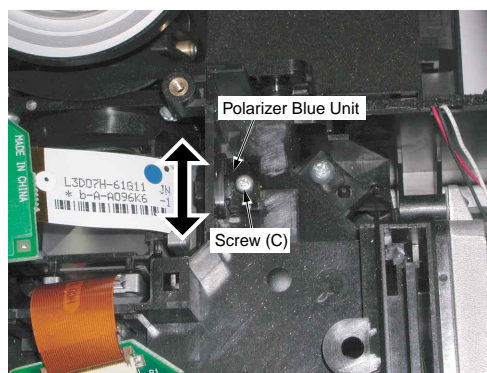
## POLARIZER RED ADJUSTMENT

1. Loosen a Screw (B) of the Light IN Polarizer Red Unit.
2. Move the Light IN Polarizer Red Unit to the right and left so that there is no red tint on the whole screen, and then tighten a Screw (B) (30+/-10 N·cm).



## POLARIZER BLUE ADJUSTMENT

1. Loosen a Screw (C) of the Light IN Polarizer Blue Unit.
2. Move the Light IN Polarizer Blue Unit to the right and left so that there is no blue tint on the whole screen, and then tighten a Screw (C) (30+/-10 N·cm).





# 7 Maintenance

## 7.1. Cleaning Methods

### THE LCD PANEL OF THE OPTICAL BLOCK UNIT

- 1) Clean the surface of the LCD Panel of the LCD/Prism Unit with an air blower or wipe with a clean, or soft blush lightly.
- 2) If any dirt remains, lightly wipe the surface with a cotton swab moistened with pure ethyl alcohol or a lens cleaner which contains no water or oil. Use a new swab after each wiping so that dirt will not be re-deposited on the surface.

### THE POLARIZER UNIT, THE INTEGRATOR 1/2, THE P/S CONVERTER,

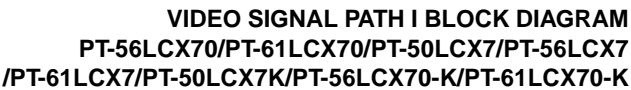
Make sure that no dust gets on the optical components such as the Polarizer Unit, Integrator and P/S Converter. Clean these optical components with cleaning paper moistened with pure ethyl alcohol or a lens cleaner which contains no water or oil.



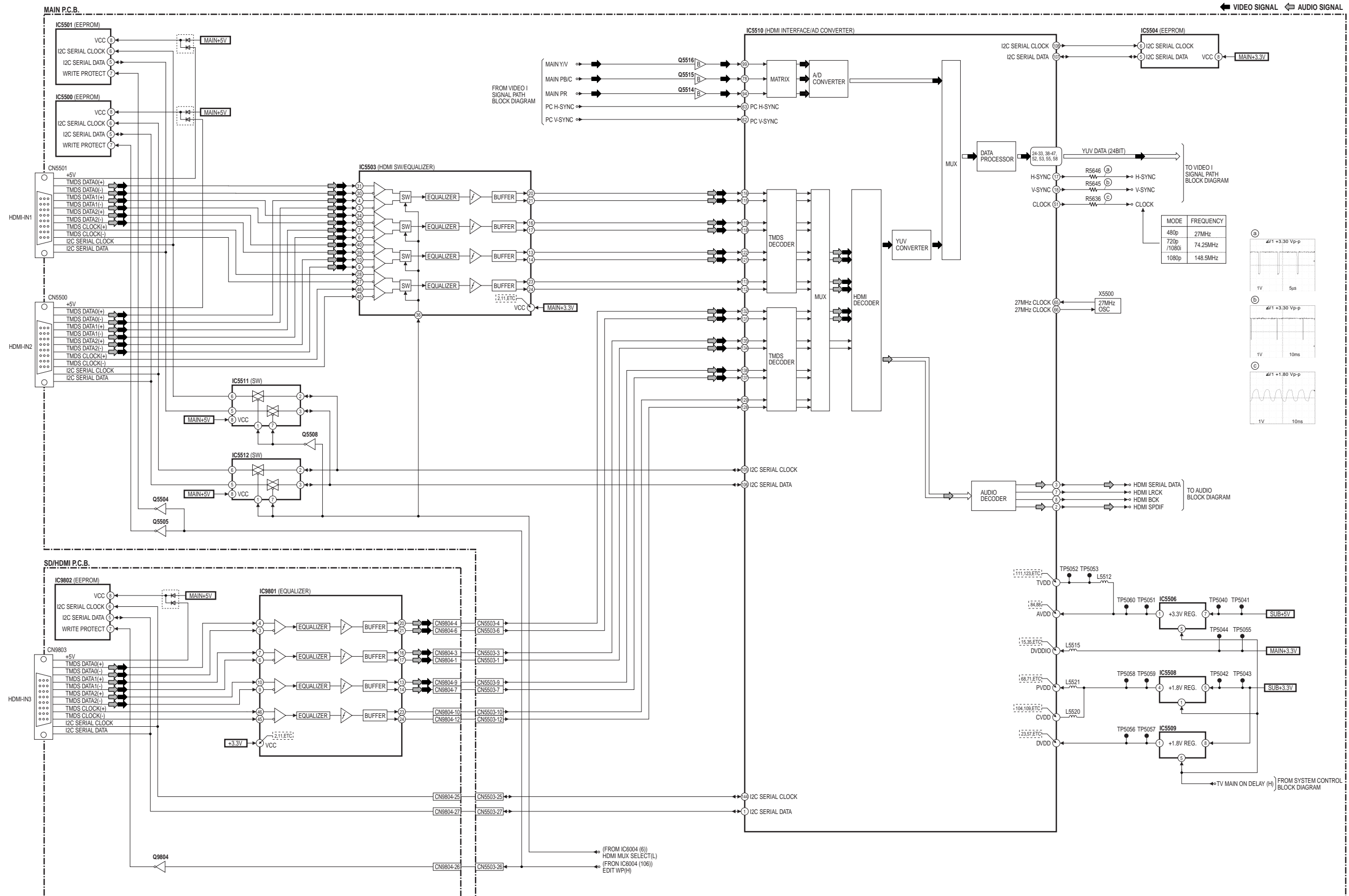
The schematic diagram illustrates the power supply system for a TV, organized into three main sections: POWER P.C.B., MAIN P.C.B., and REAR JACK P.C.B.

**POWER P.C.B.:** This section handles the AC input. It starts with an AC IN connected to a line filter (L802) and a full-wave rectifier (D1001). The output is filtered by a capacitor (C1002). A switching control IC (IC1001) manages the power, including overvoltage protection, zero current detection, error voltage detection, and overcurrent detection. A shunt regulator (IC1003) is used for voltage regulation. A standby power circuit (T801) is also present. The section includes various components like capacitors (F1001, C1002, C1003, C1004, C1005, C1006, C1007, C1008, C1009, C1010, C1011, C1012, C1013, C1014, C1015, C1016, C1017, C1018, C1019, C1020, C1021, C1022, C1023, C1024, C1025, C1026, C1027, C1028, C1029, C1030, C1031, C1032, C1033, C1034, C1035, C1036, C1037, C1038, C1039, C1040, C1041, C1042, C1043, C1044, C1045, C1046, C1047, C1048, C1049, C1050, C1051, C1052, C1053, C1054, C1055, C1056, C1057, C1058, C1059, C1060, C1061, C1062, C1063, C1064, C1065, C1066, C1067, C1068, C1069, C1070, C1071, C1072, C1073, C1074, C1075, C1076, C1077, C1078, C1079, C1080, C1081, C1082, C1083, C1084, C1085, C1086, C1087, C1088, C1089, C1090, C1091, C1092, C1093, C1094, C1095, C1096, C1097, C1098, C1099, C1100, C1101, C1102, C1103, C1104, C1105, C1106, C1107, C1108, C1109, C1110, C1111, C1112, C1113, C1114, C1115, C1116, C1117, C1118, C1119, C1120, C1121, C1122, C1123, C1124, C1125, C1126, C1127, C1128, C1129, C1130, C1131, C1132, C1133, C1134, C1135, C1136, C1137, C1138, C1139, C1140, C1141, C1142, C1143, C1144, C1145, C1146, C1147, C1148, C1149, C1150, C1151, C1152, C1153, C1154, C1155, C1156, C1157, C1158, C1159, C1160, C1161, C1162, C1163, C1164, C1165, C1166, C1167, C1168, C1169, C1170, C1171, C1172, C1173, C1174, C1175, C1176, C1177, C1178, C1179, C1180, C1181, C1182, C1183, C1184, C1185, C1186, C1187, C1188, C1189, C1190, C1191, C1192, C1193, C1194, C1195, C1196, C1197, C1198, C1199, C1200, C1201, C1202, C1203, C1204, C1205, C1206, C1207, C1208, C1209, C1210, C1211, C1212, C1213, C1214, C1215, C1216, C1217, C1218, C1219, C1220, C1221, C1222, C1223, C1224, C1225, C1226, C1227, C1228, C1229, C1230, C1231, C1232, C1233, C1234, C1235, C1236, C1237, C1238, C1239, C1240, C1241, C1242, C1243, C1244, C1245, C1246, C1247, C1248, C1249, C1250, C1251, C1252, C1253, C1254, C1255, C1256, C1257, C1258, C1259, C1260, C1261, C1262, C1263, C1264, C1265, C1266, C1267, C1268, C1269, C1270, C1271, C1272, C1273, C1274, C1275, C1276, C1277, C1278, C1279, C1280, C1281, C1282, C1283, C1284, C1285, C1286, C1287, C1288, C1289, C1290, C1291, C1292, C1293, C1294, C1295, C1296, C1297, C1298, C1299, C1300, C1301, C1302, C1303, C1304, C1305, C1306, C1307, C1308, C1309, C1310, C1311, C1312, C1313, C1314, C1315, C1316, C1317, C1318, C1319, C1320, C1321, C1322, C1323, C1324, C1325, C1326, C1327, C1328, C1329, C1330, C1331, C1332, C1333, C1334, C1335, C1336, C1337, C1338, C1339, C1340, C1341, C1342, C1343, C1344, C1345, C1346, C1347, C1348, C1349, C1350, C1351, C1352, C1353, C1354, C1355, C1356, C1357, C1358, C1359, C1360, C1361, C1362, C1363, C1364, C1365, C1366, C1367, C1368, C1369, C1370, C1371, C1372, C1373, C1374, C1375, C1376, C1377, C1378, C1379, C1380, C1381, C1382, C1383, C1384, C1385, C1386, C1387, C1388, C1389, C1390, C1391, C1392, C1393, C1394, C1395, C1396, C1397, C1398, C1399, C1400, C1401, C1402, C1403, C1404, C1405, C1406, C1407, C1408, C1409, C1410, C1411, C1412, C1413, C1414, C1415, C1416, C1417, C1418, C1419, C1420, C1421, C1422, C1423, C1424, C1425, C1426, C1427, C1428, C1429, C1430, C1431, C1432, C1433, C1434, C1435, C1436, C1437, C1438, C1439, C1440, C1441, C1442, C1443, C1444, C1445, C1446, C1447, C1448, C1449, C1450, C1451, C1452, C1453, C1454, C1455, C1456, C1457, C1458, C1459, C1460, C1461, C1462, C1463, C1464, C1465, C1466, C1467, C1468, C1469, C1470, C1471, C1472, C1473, C1474, C1475, C1476, C1477, C1478, C1479, C1480, C1481, C1482, C1483, C1484, C1485, C1486, C1487, C1488, C1489, C1490, C1491, C1492, C1493, C1494, C1495, C1496, C1497, C1498, C1499, C1500, C1501, C1502, C1503, C1504, C1505, C1506, C1507, C1508, C1509, C1510, C1511, C1512, C1513, C1514, C1515, C1516, C1517, C1518, C1519, C1520, C1521, C1522, C1523, C1524, C1525, C1526, C1527, C1528, C1529, C1530, C1531, C1532, C1533, C1534, C1535, C1536, C1537, C1538, C1539, C1540, C1541, C1542, C1543, C1544, C1545, C1546, C1547, C1548, C1549, C1550, C1551, C1552, C1553, C1554, C1555, C1556, C1557, C1558, C1559, C1560, C1561, C1562, C1563, C1564, C1565, C1566, C1567, C1568, C1569, C1570, C1571, C1572, C1573, C1574, C1575, C1576, C1577, C1578, C1579, C1580, C1581, C1582, C1583, C1584, C1585, C1586, C1587, C1588, C1589, C1590, C1591, C1592, C1593, C1594, C1595, C1596, C1597, C1598, C1599, C1600, C1601, C1602, C1603, C1604, C1605, C1606, C1607, C1608, C1609, C1610, C16

55

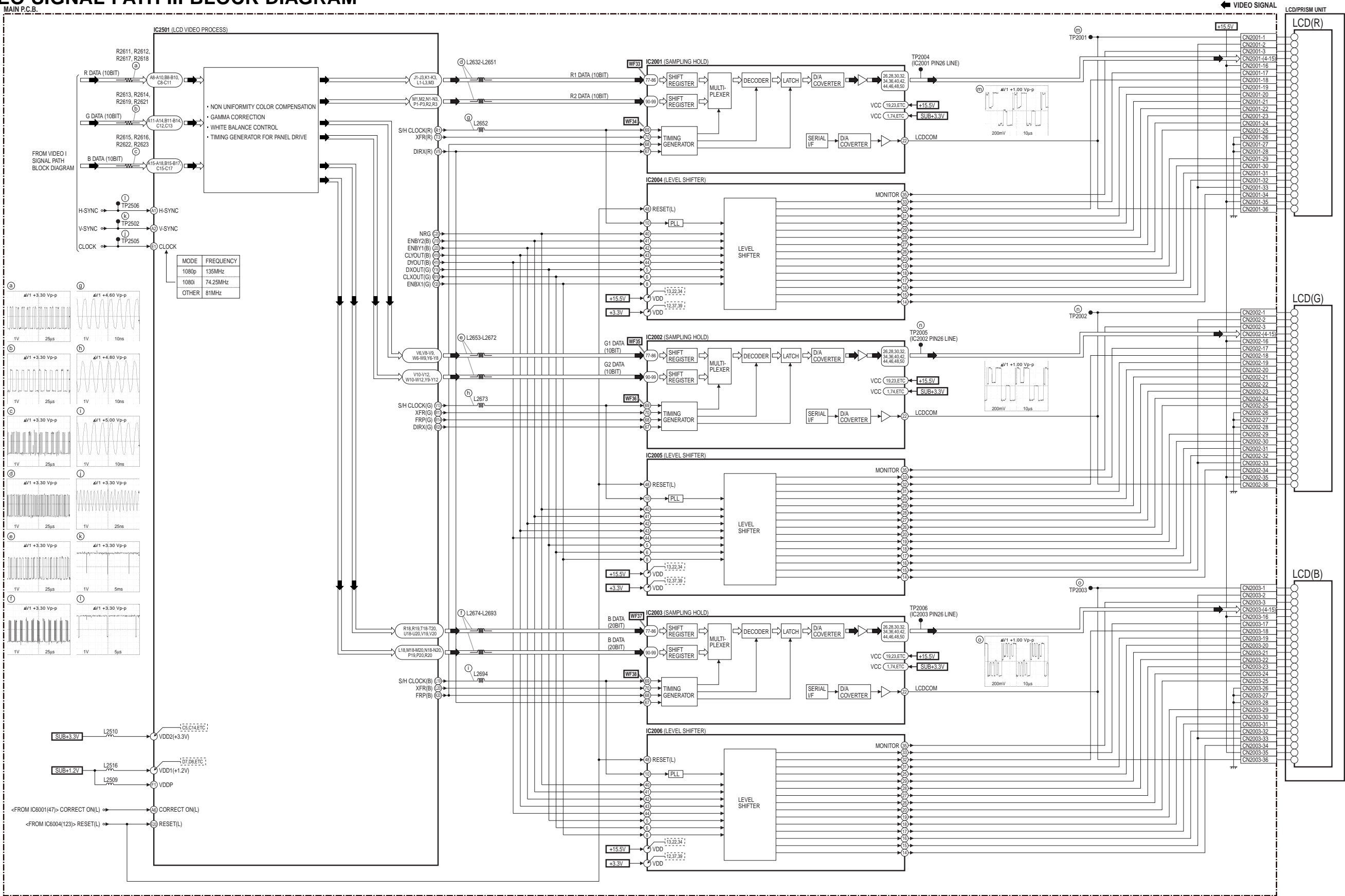


## VIDEO SIGNAL PATH II BLOCK DIAGRAM

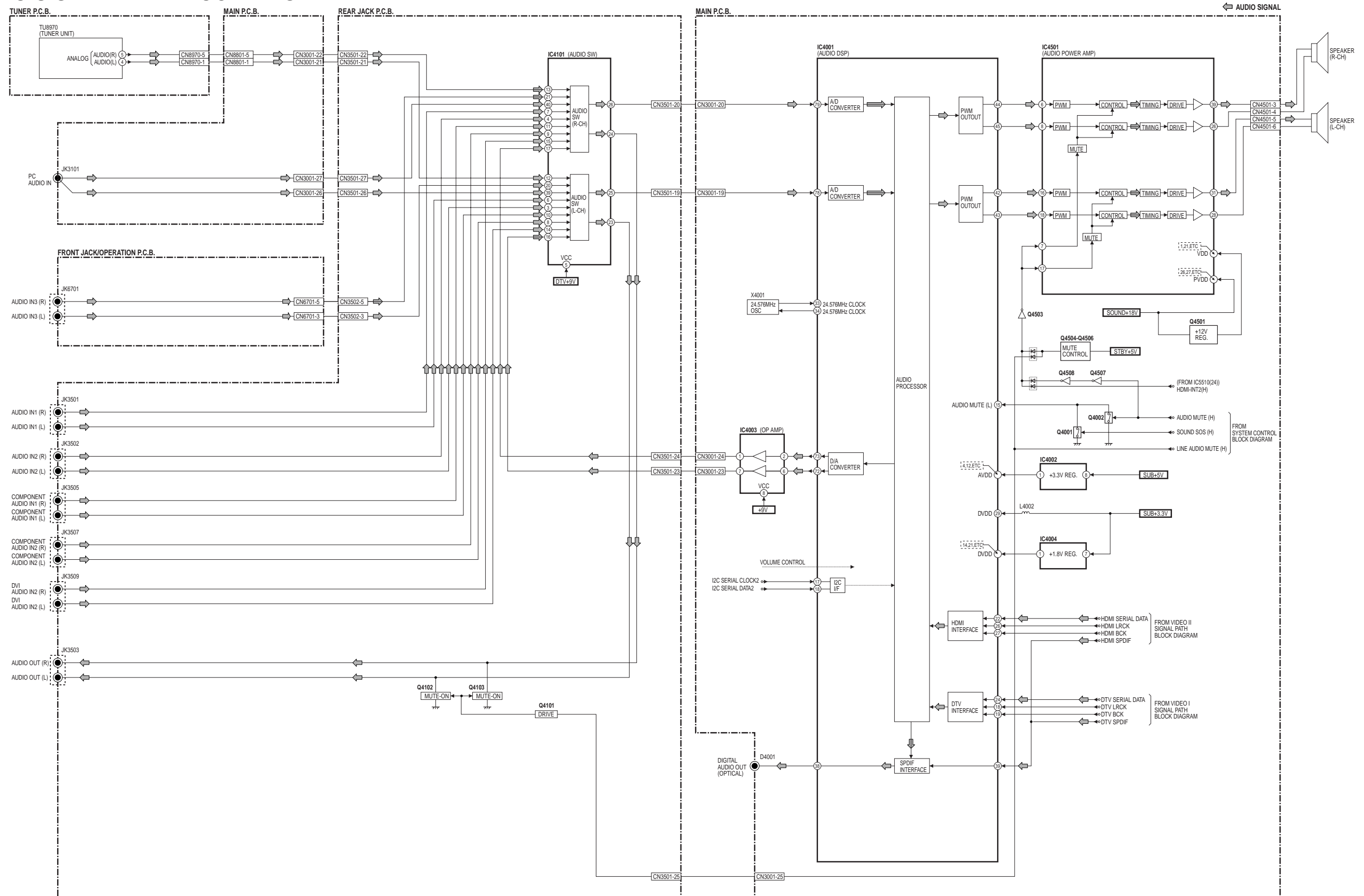


VIDEO SIGNAL PATH II BLOCK DIAGRAM  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

VIDEO SIGNAL PATH III BLOCK DIAGRAM



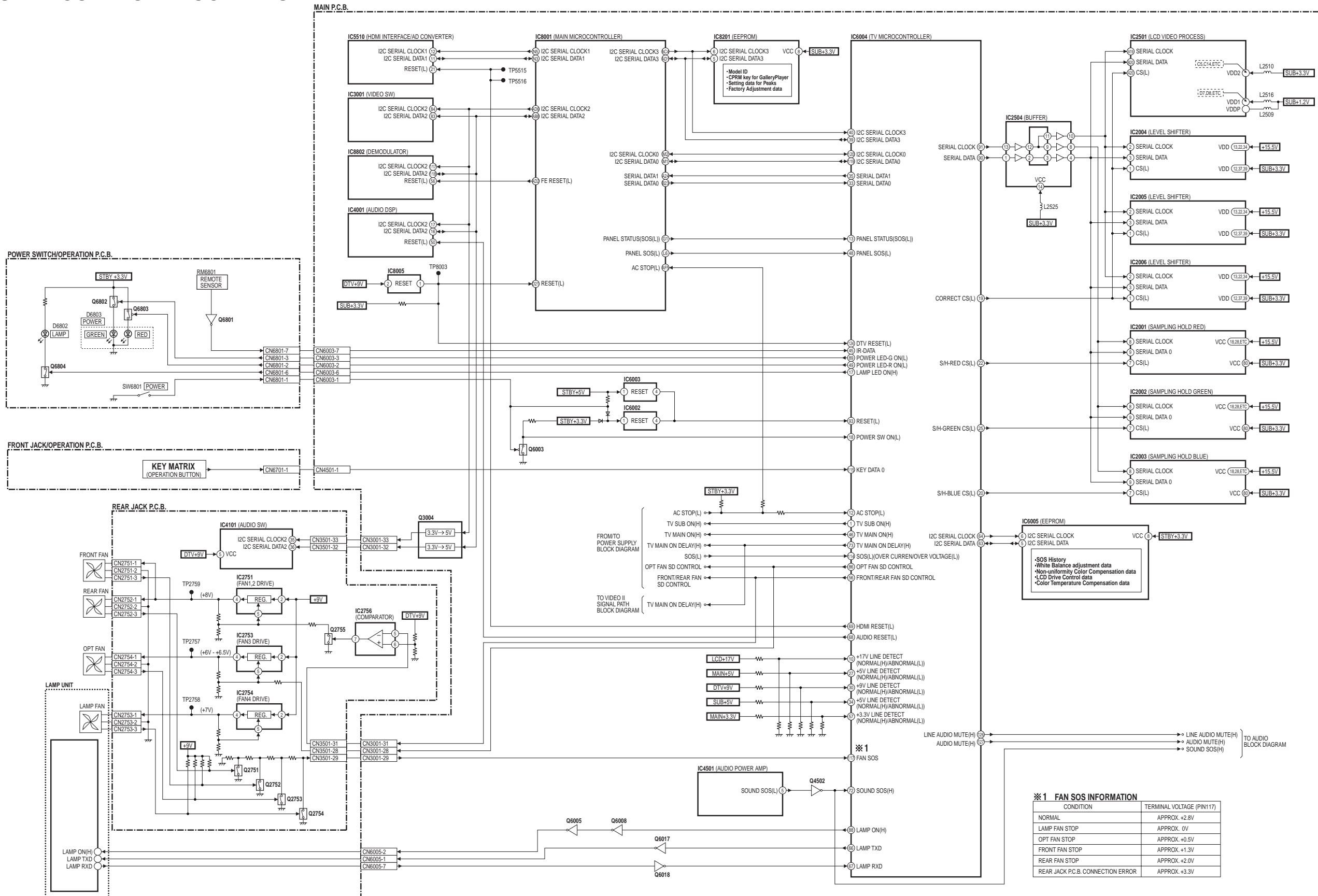
## AUDIO SIGNAL PATH BLOCK DIAGRAM



**AUDIO SIGNAL PATH BLOCK DIAGRAM**  
**PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7**  
**/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K**



## SYSTEM CONTROL BLOCK DIAGRAM






**SYSTEM CONTROL BLOCK DIAGRAM**  
**PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7**  
**/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K**



# 9 Schematic Diagrams

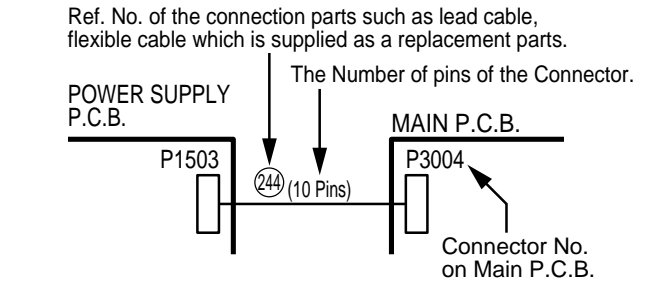
## 9.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT NOTES

1. **Important safety notice**  
Components identified by the sign  have special characteristics important for safety. When replacing any of these components. Use only the specified parts.
2. Do not use the part number shown on this drawing for ordering.  
The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.
3. Use only original replacement parts:  
To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.
4. Parts different in shape or size may be used.  
However, only interchangeable parts will be supplied as service replacement parts.
5. Test point information  
 : Test point with a jumper wire across a hole in P.C.B.  
 : Test point with no test pin.

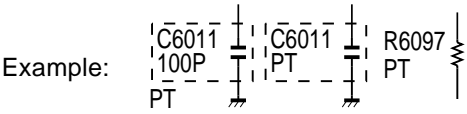
### Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes  
The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.  
  
Example:  
(6.2V).....Zener Voltage
2. How to identify Connectors  
Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to, in other words, its counter part.  
Use the interconnection schematic diagram to find the connection between associated connectors.

Example:  
The connections between P.C.B.s are shown below.



3. Parts marked "PT" are not used in any models included in this service model.



4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

### Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.  
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

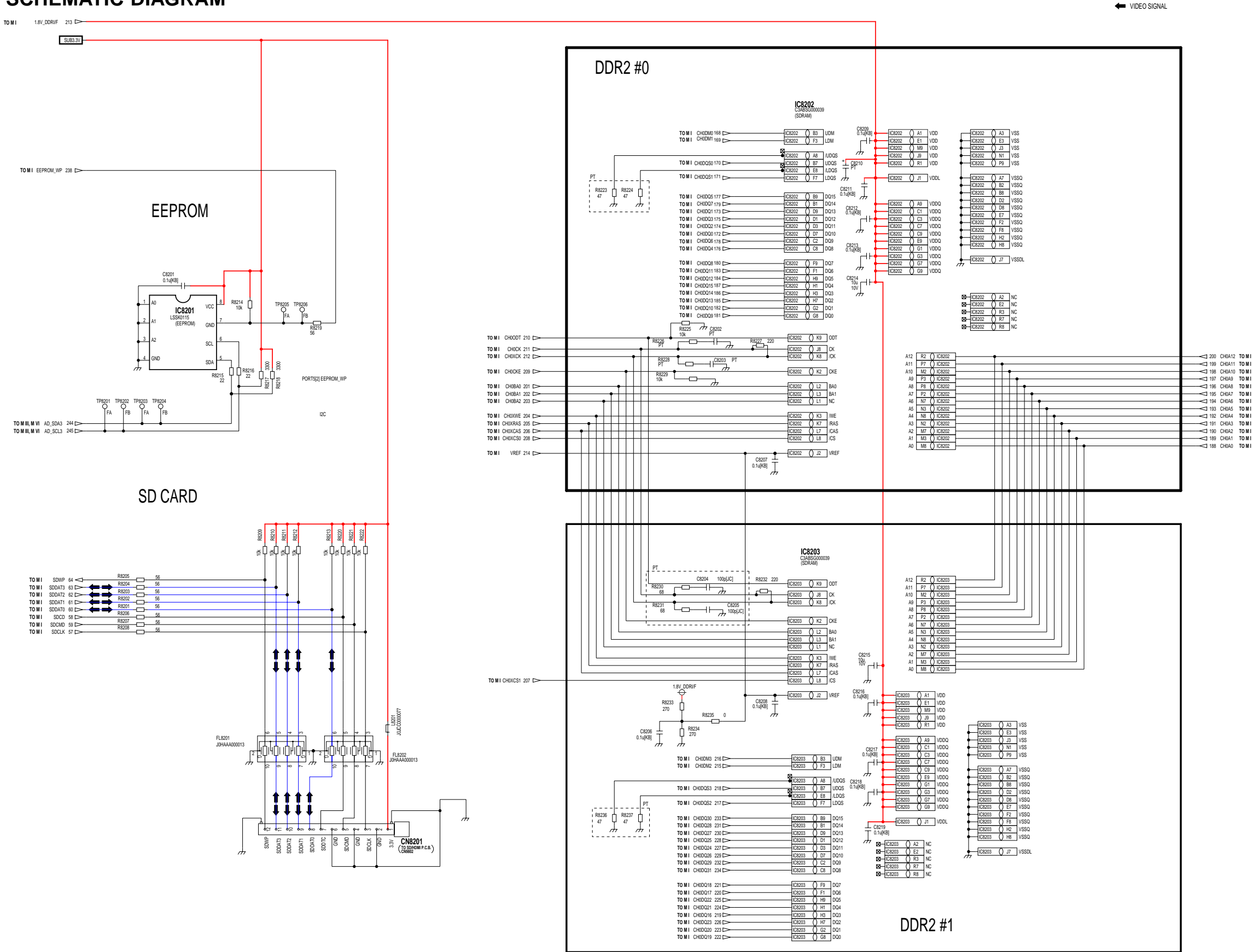
NOTE:  
Circuit Board Layout includes components which are not used.

← VIDEO SIGNAL   ← AUDIO SIGNAL



/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

MAIN II SCHEMATIC DIAGRAM



← VIDEO SIGNAL



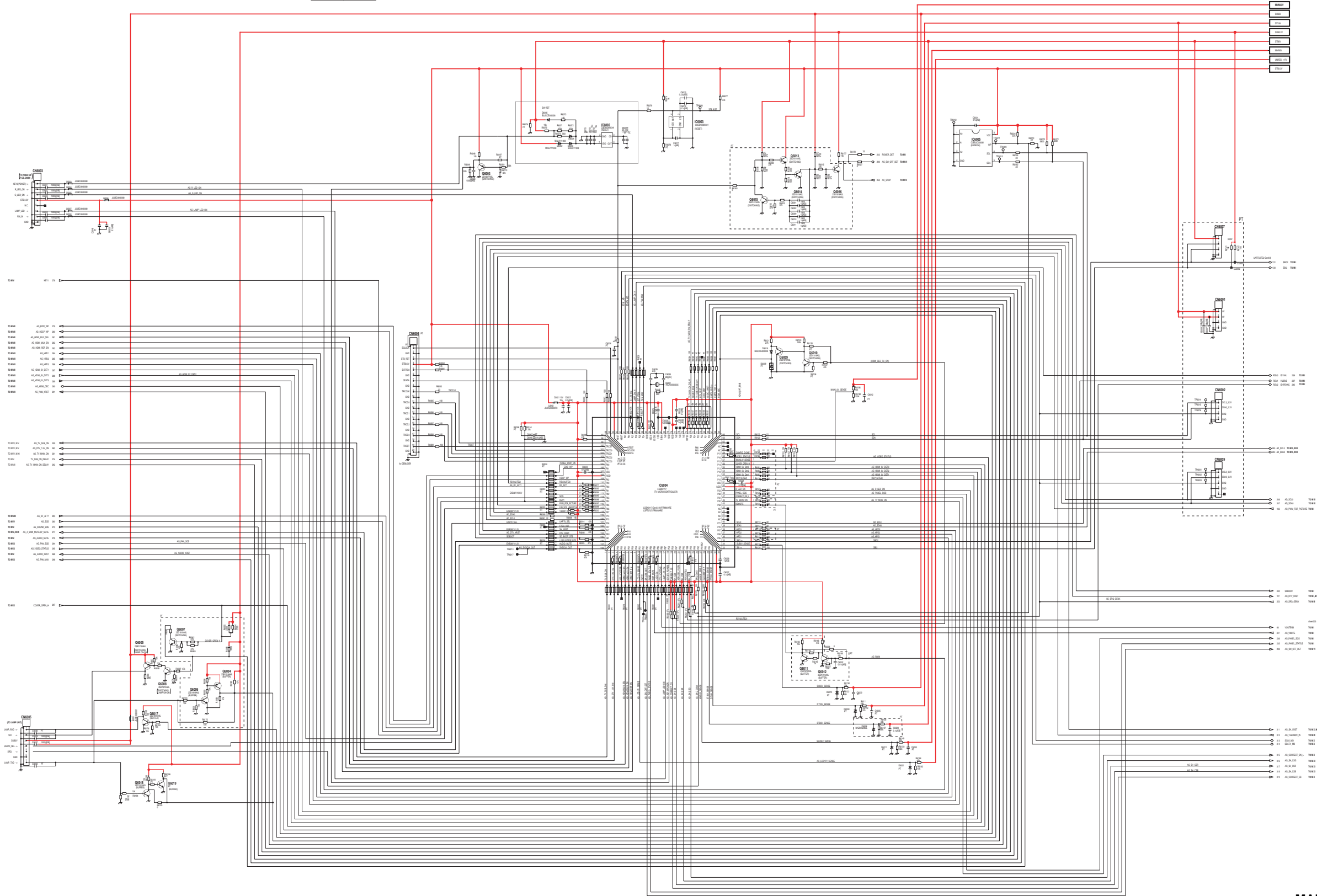






MAIN VI SCHEMATIC DIAGRAM

1	2
3	4

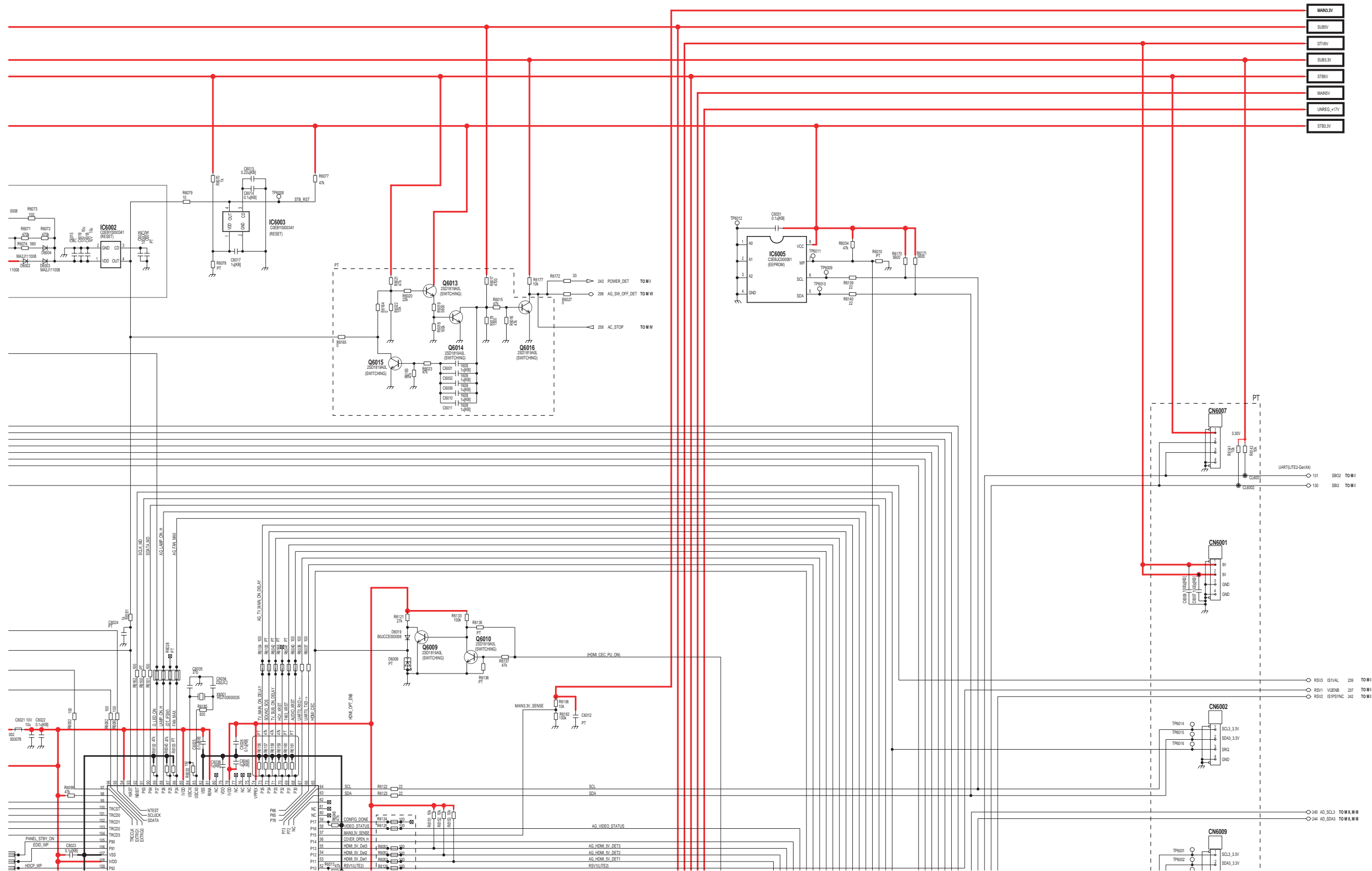


MAIN VI SCHEMATIC DIAGRAM  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K





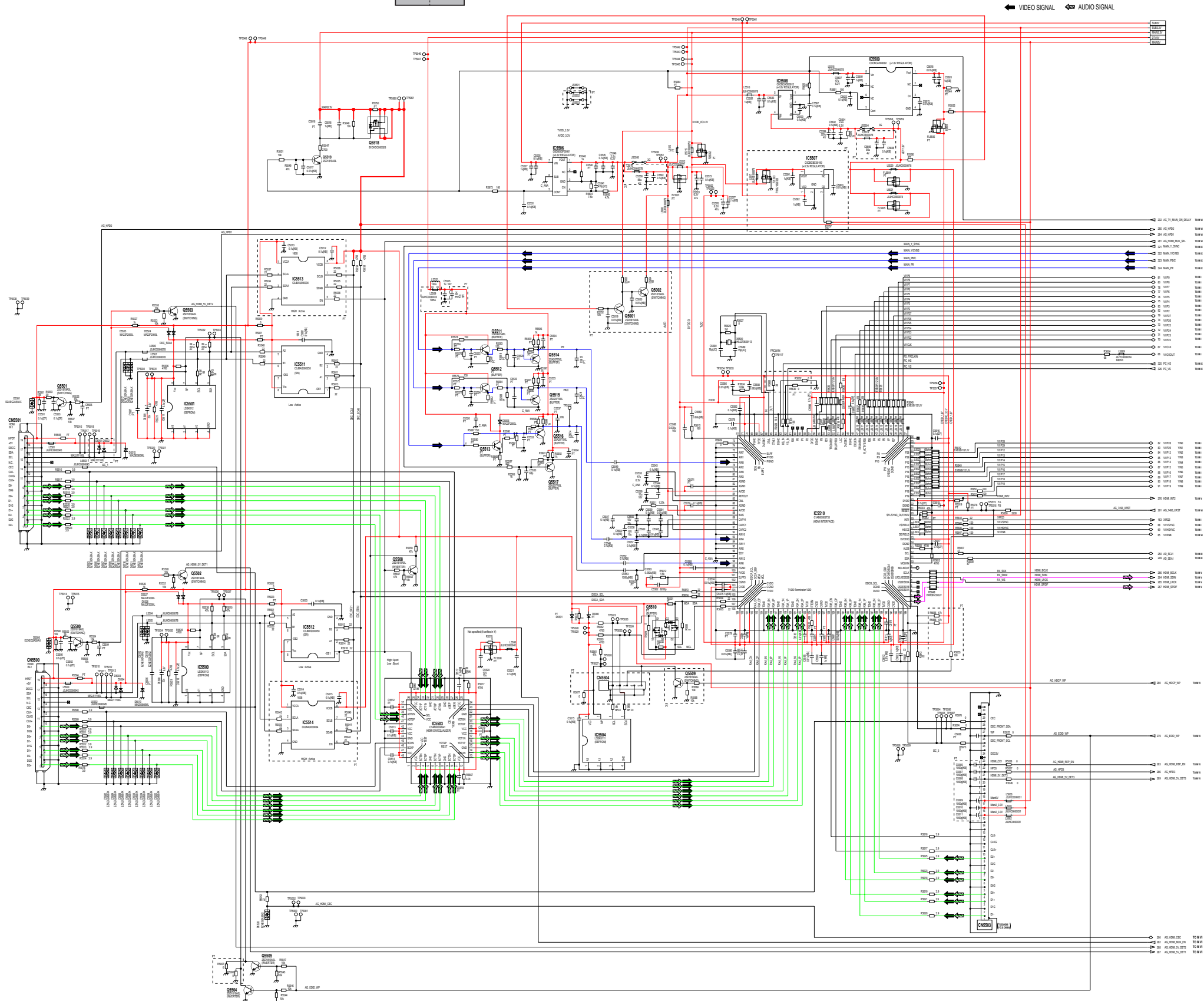
1	2
3	4



[illegible]

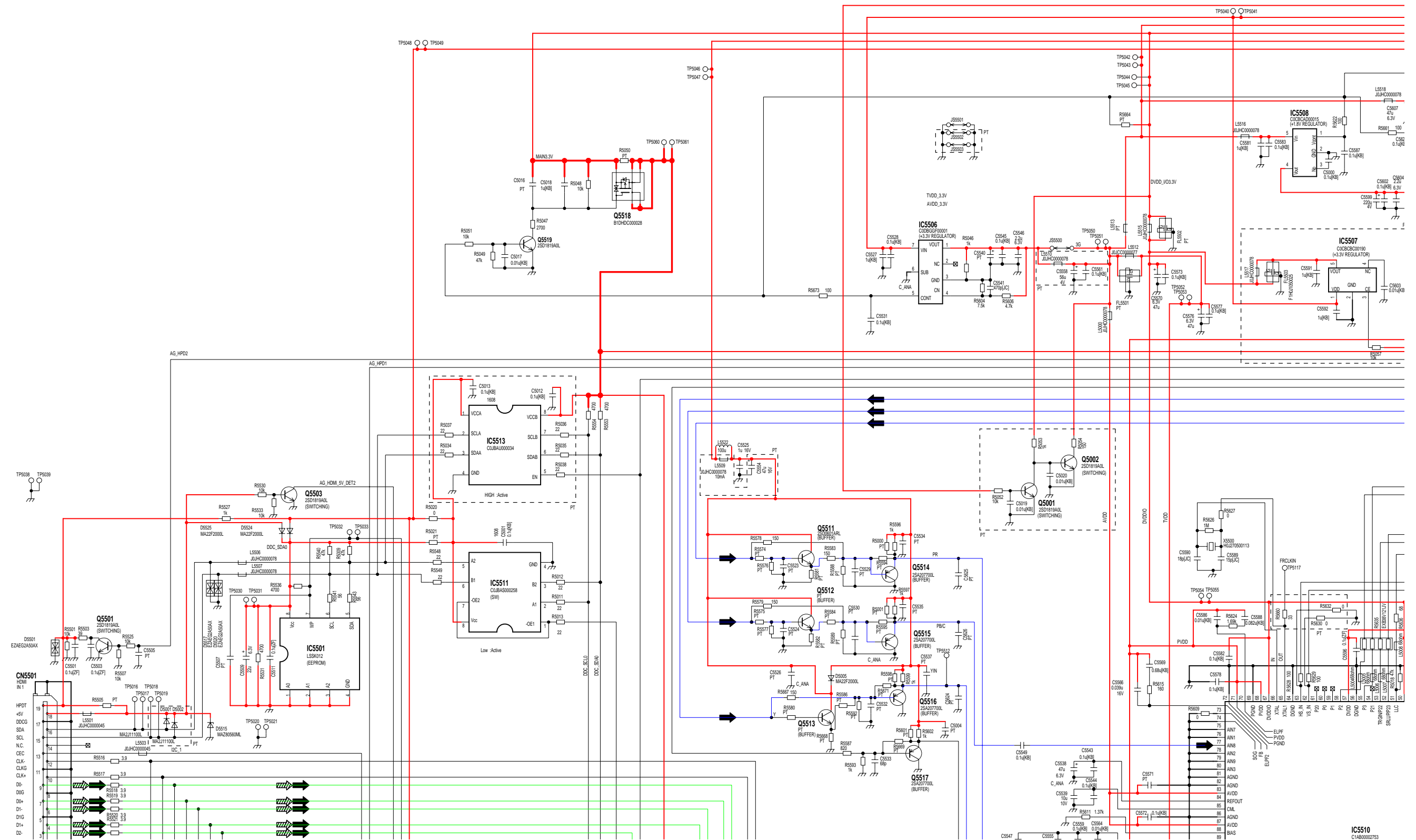


1	2
3	4



**MAIN VII SCHEMATIC DIAGRAM**  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

1	2
3	4



 VIDEO SIGNAL    
  AUDIO SIGNAL





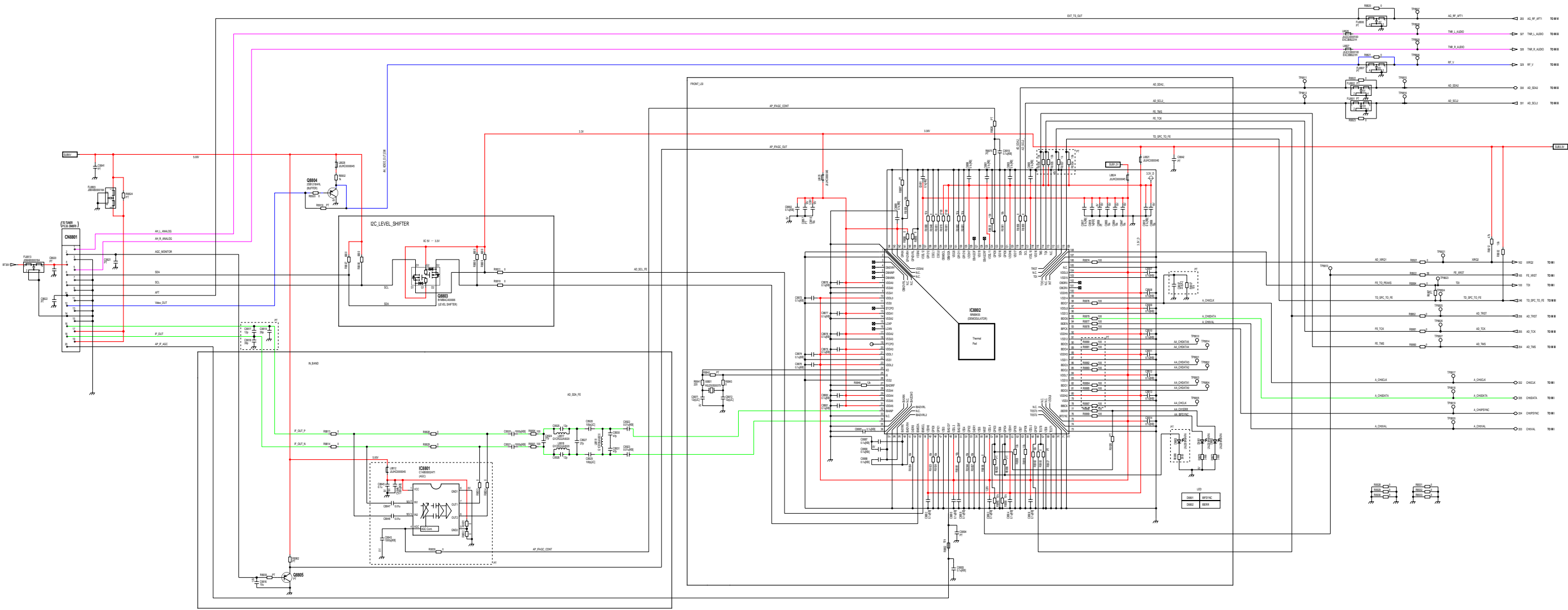




MAIN VIII SCHEMATIC DIAGRAM

1 2

Front End

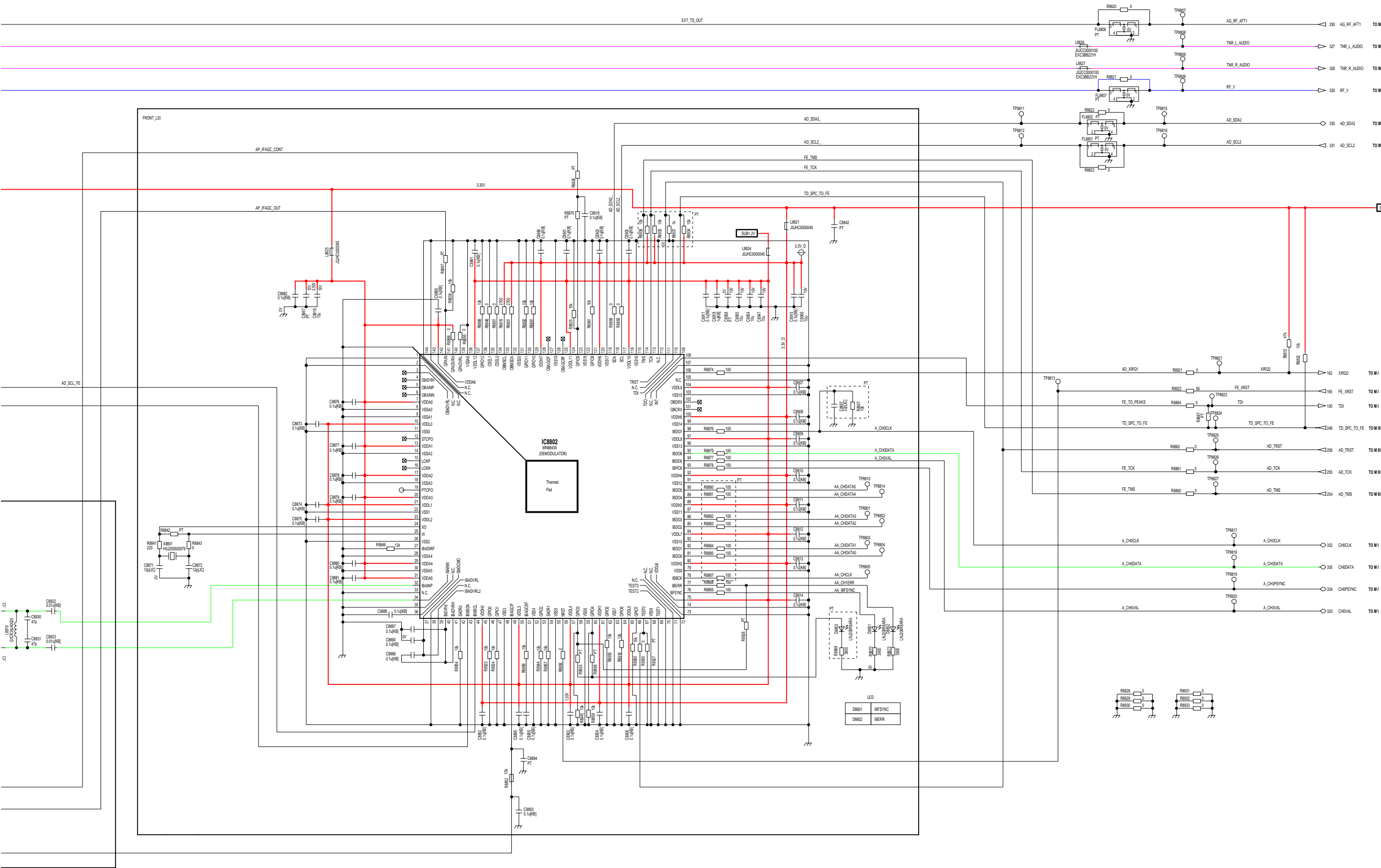


MAIN VIII SCHEMATIC DIAGRAM  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

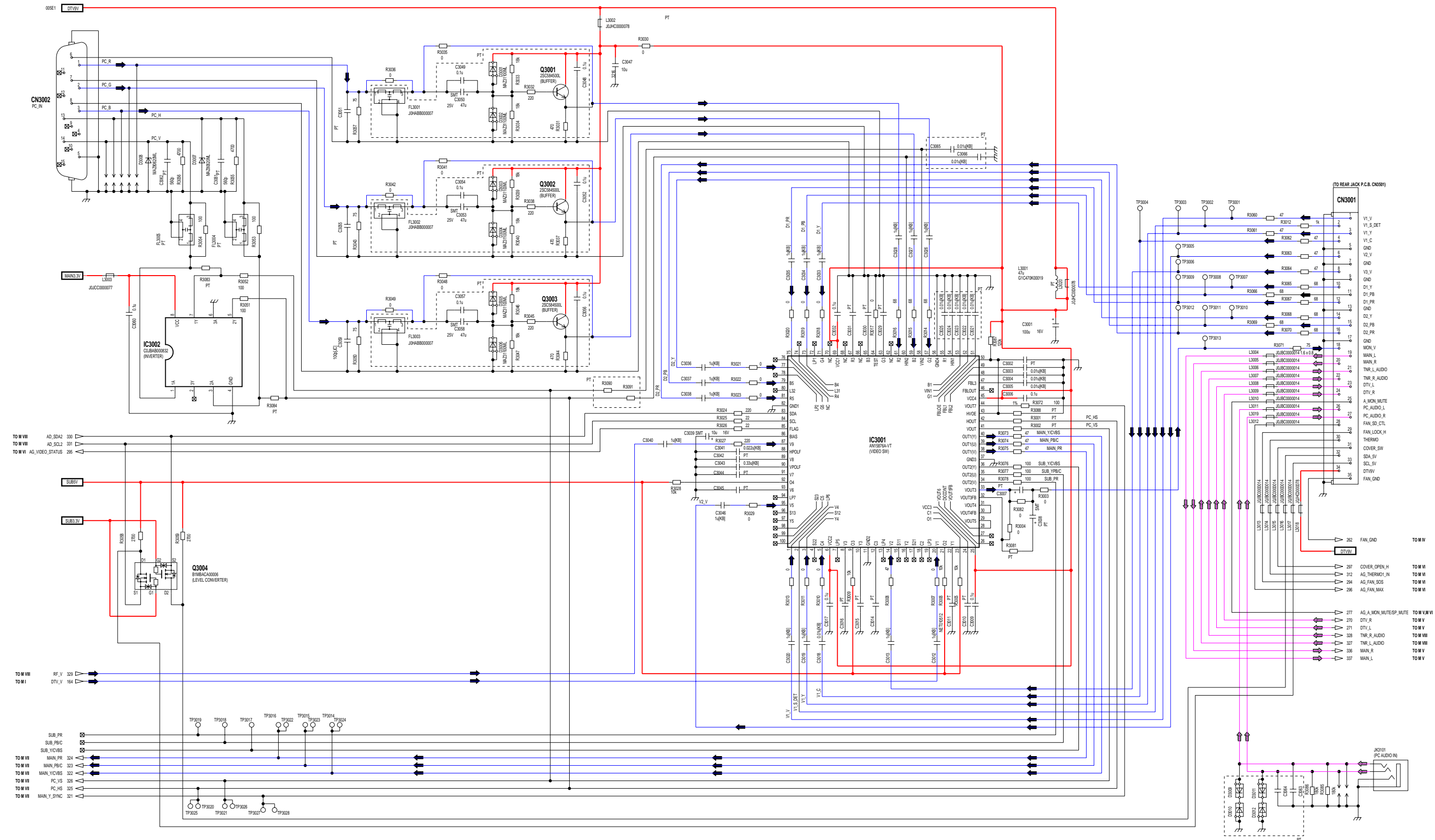


MAIN VIII SCHEMATIC DIAGRAM

1 2



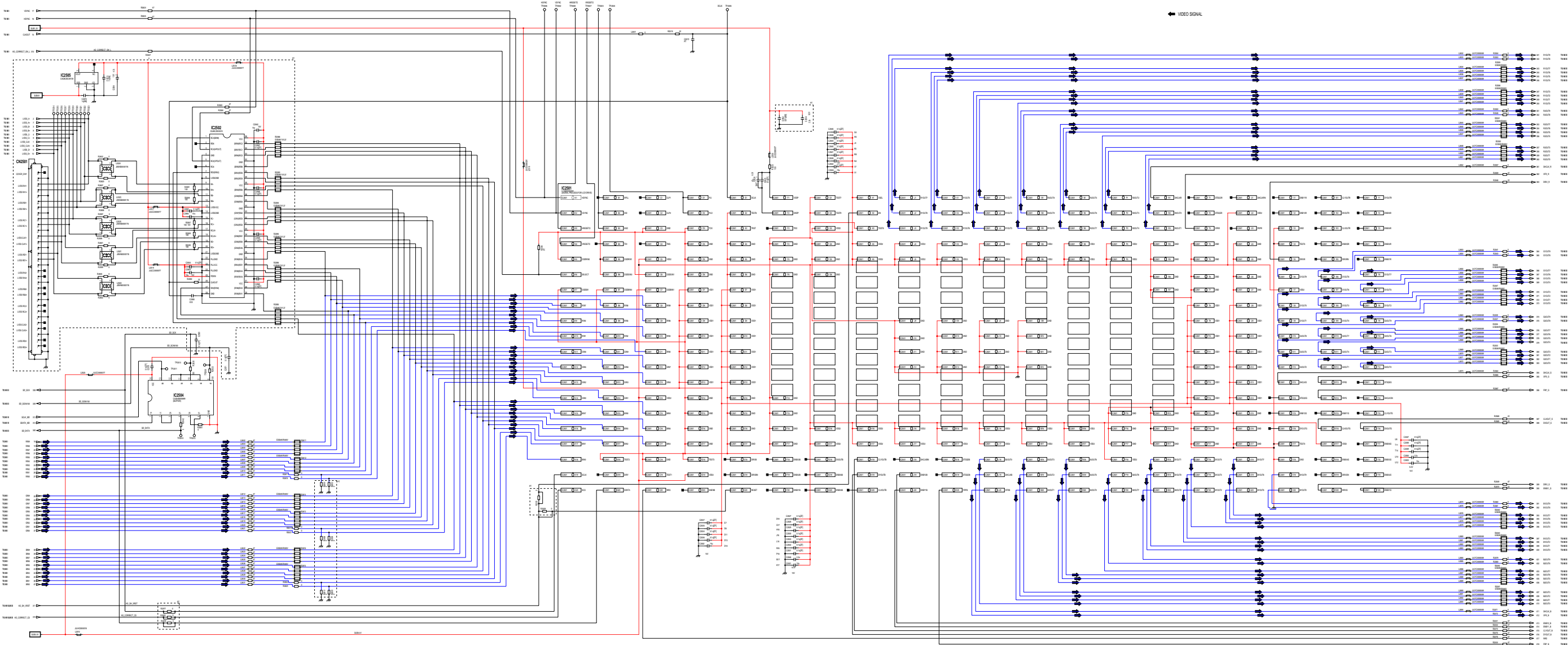
## MAIN IX SCHEMATIC DIAGRAM



**MAIN IX SCHEMATIC DIAGRAM**  
**PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7**  
**/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K**

MAIN X SCHEMATIC DIAGRAM

1	2
3	4



MAIN X SCHEMATIC DIAGRAM  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K





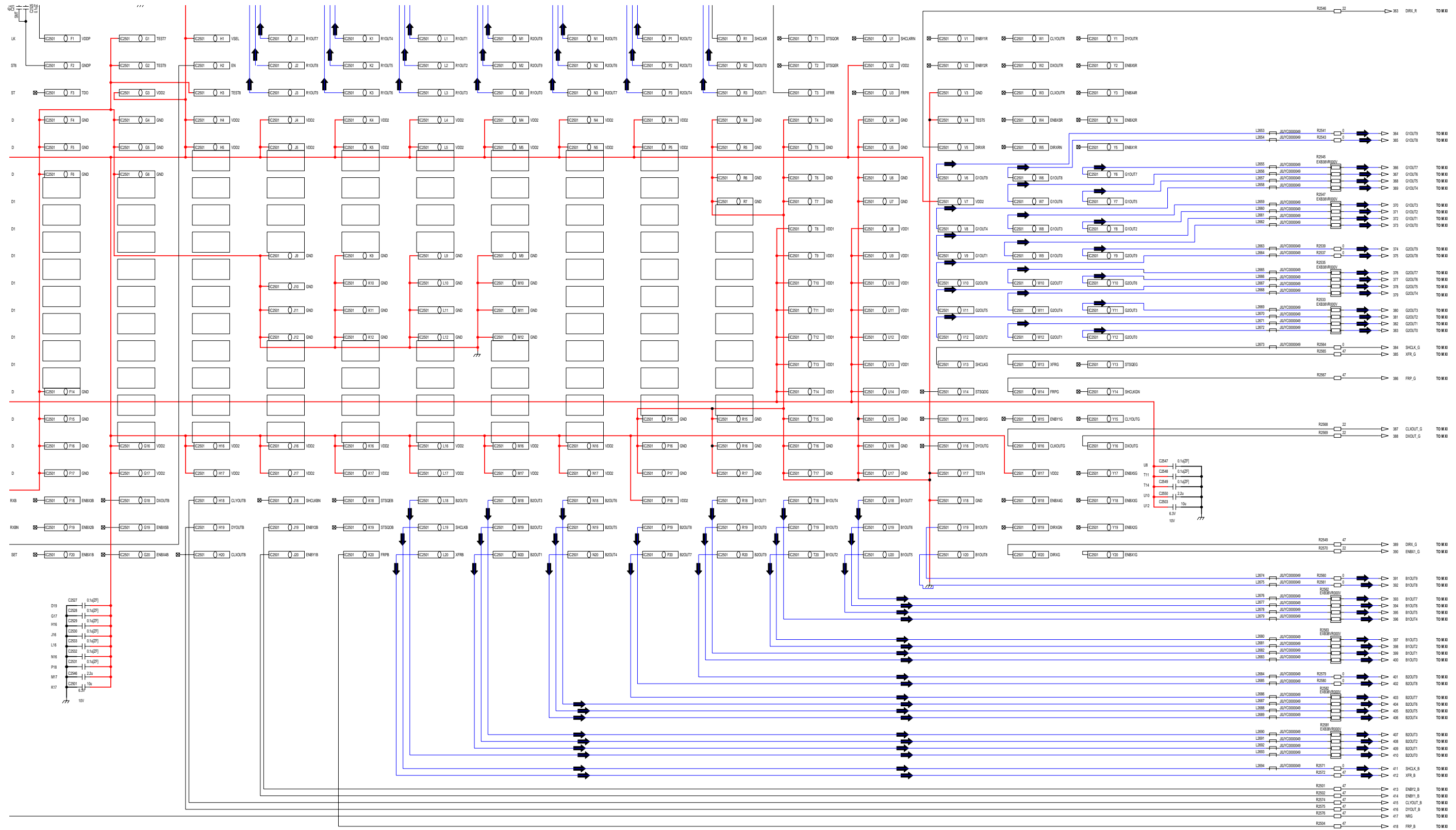
← VIDEO SIGNAL



1	2
3	4



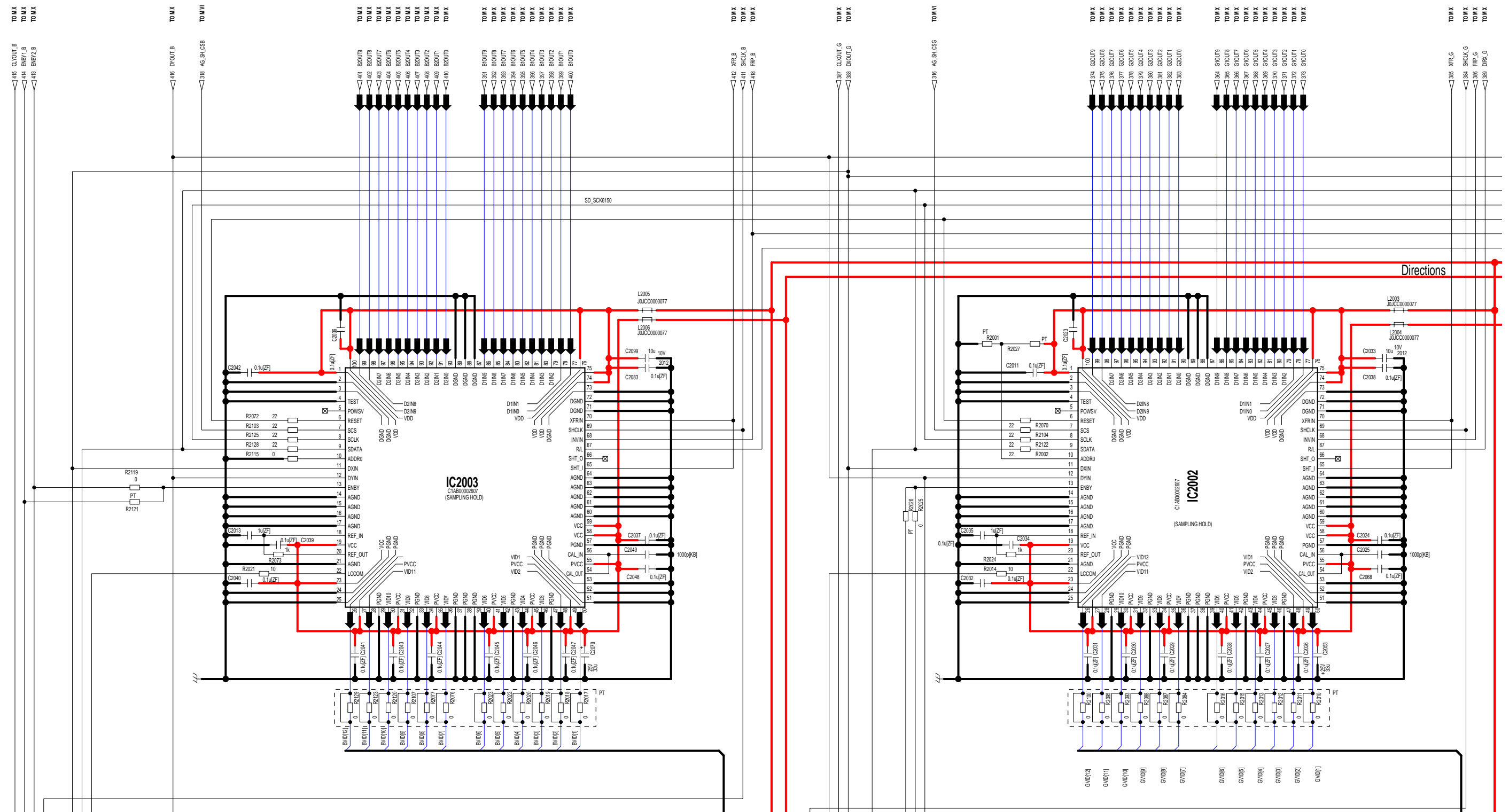
1	2
3	4



The diagram illustrates a 4-camera system architecture. It features four camera modules (IC2001, IC2002, IC2003, IC2004) and a central processing unit (IC2005). Each camera module is connected to the central unit via a series of control and data lines. The system is powered by a 5V supply, with ground connections throughout. A 'VIDEO SIGNAL' input is provided at the top right. The bottom of the diagram shows a connector block labeled 'CN2001' through 'CN2004'. The diagram is color-coded with red for power and ground, and blue for data and control lines. A 'Directions' label is present near the central unit. The bottom right corner includes a small circuit for a sensor or indicator, labeled 'IC2007'.

86

1	2
3	4



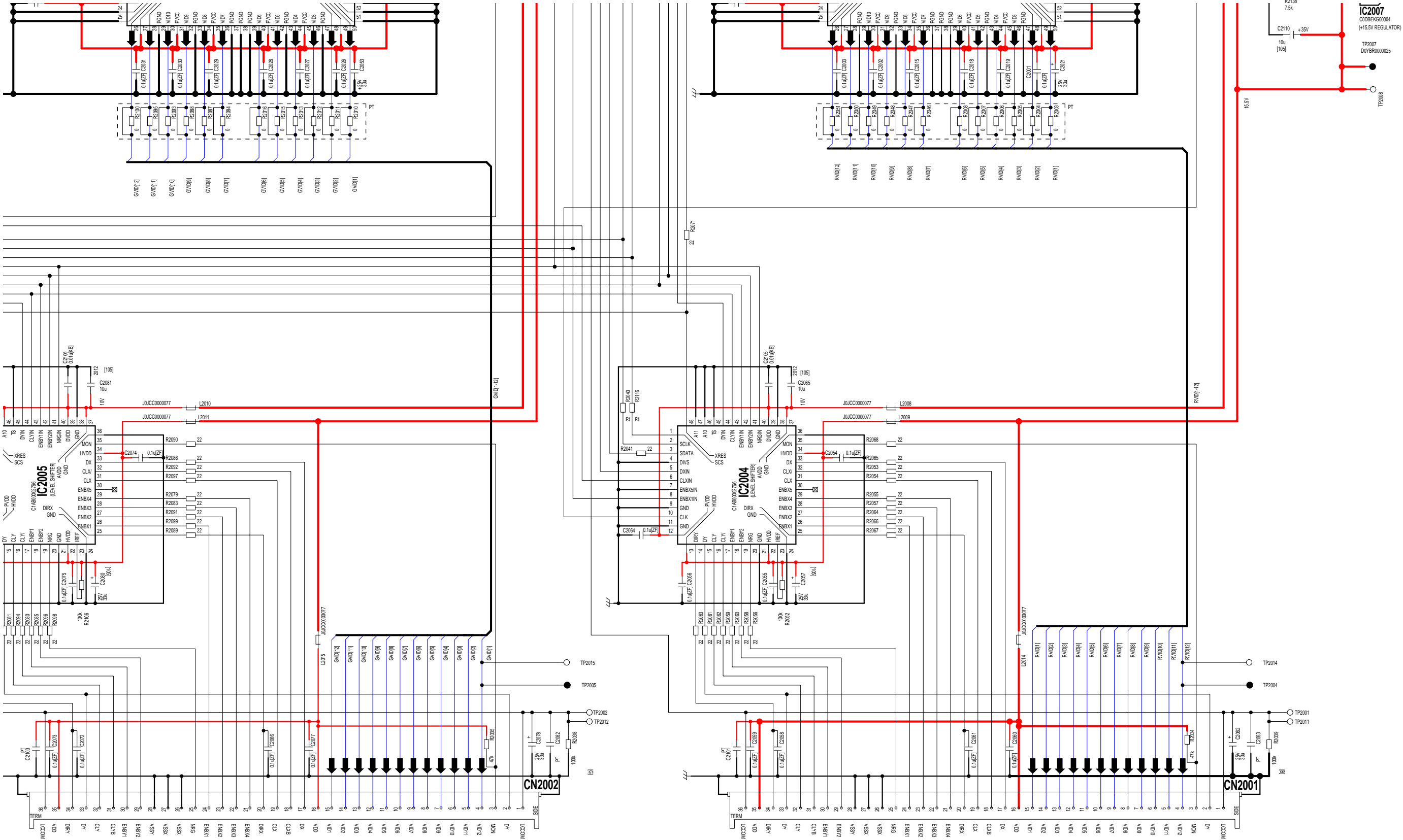
The image displays a detailed PCB layout for two modules, IC2001 and IC2002, which are part of a larger system. The layout includes various components such as resistors (R2001, R2002, R2003, R2004, R2005, R2006, R2007, R2008, R2009, R2010, R2011, R2012, R2013, R2014, R2015, R2016, R2017, R2018, R2019, R2020, R2021, R2022, R2023, R2024, R2025, R2026, R2027, R2028, R2029, R2030, R2031, R2032, R2033, R2034, R2035, R2036, R2037, R2038, R2039, R2040, R2041, R2042, R2043, R2044, R2045, R2046, R2047, R2048, R2049, R2050, R2051, R2052, R2053, R2054, R2055, R2056, R2057, R2058, R2059, R2060, R2061, R2062, R2063, R2064, R2065, R2066, R2067, R2068, R2069, R2070, R2071, R2072, R2073, R2074, R2075, R2076, R2077, R2078, R2079, R2080, R2081, R2082, R2083, R2084, R2085, R2086, R2087, R2088, R2089, R2090, R2091, R2092, R2093, R2094, R2095, R2096, R2097, R2098, R2099, R2100, R2101, R2102, R2103, R2104, R2105, R2106, R2107, R2108, R2109, R2110, R2111, R2112, R2113, R2114, R2115, R2116, R2117, R2118, R2119, R2120, R2121, R2122, R2123, R2124, R2125, R2126, R2127, R2128, R2129, R2130, R2131, R2132, R2133, R2134, R2135, R2136, R2137, R2138, R2139, R2140, R2141, R2142, R2143, R2144, R2145, R2146, R2147, R2148, R2149, R2150, R2151, R2152, R2153, R2154, R2155, R2156, R2157, R2158, R2159, R2160, R2161, R2162, R2163, R2164, R2165, R2166, R2167, R2168, R2169, R2170, R2171, R2172, R2173, R2174, R2175, R2176, R2177, R2178, R2179, R2180, R2181, R2182, R2183, R2184, R2185, R2186, R2187, R2188, R2189, R2190, R2191, R2192, R2193, R2194, R2195, R2196, R2197, R2198, R2199, R2200, R2201, R2202, R2203, R2204, R2205, R2206, R2207, R2208, R2209, R2210, R2211, R2212, R2213, R2214, R2215, R2216, R2217, R2218, R2219, R2220, R2221, R2222, R2223, R2224, R2225, R2226, R2227, R2228, R2229, R2230, R2231, R2232, R2233, R2234, R2235, R2236, R2237, R2238, R2239, R2240, R2241, R2242, R2243, R2244, R2245, R2246, R2247, R2248, R2249, R2250, R2251, R2252, R2253, R2254, R2255, R2256, R2257, R2258, R2259, R2260, R2261, R2262, R2263, R2264, R2265, R2266, R2267, R2268, R2269, R2270, R2271, R2272, R2273, R2274, R2275, R2276, R2277, R2278, R2279, R2280, R2281, R2282, R2283, R2284, R2285, R2286, R2287, R2288, R2289, R2290, R2291, R2292, R2293, R2294, R2295, R2296, R2297, R2298, R2299, R2300, R2301, R2302, R2303, R2304, R2305, R2306, R2307, R2308, R2309, R2310, R2311, R2312, R2313, R2314, R2315, R2316, R2317, R2318, R2319, R2320, R2321, R2322, R2323, R2324, R2325, R2326, R2327, R2328, R2329, R2330, R2331, R2332, R2333, R2334, R2335, R2336, R2337, R2338, R2339, R2340, R2341, R2342, R2343, R2344, R2345, R2346, R2347, R2348, R2349, R2350, R2351, R2352, R2353, R2354, R2355, R2356, R2357, R2358, R2359, R2360, R2361, R2362, R2363, R2364, R2365, R2366, R2367, R2368, R2369, R2370, R2371, R2372, R2373, R2374, R2375, R2376, R2377, R2378, R2379, R2380, R2381, R2382, R2383, R2384, R2385, R2386, R2387, R2388, R2389, R2390, R2391, R2392, R2393, R2394, R2395, R2396, R2397, R2398, R2399, R2400, R2401, R2402, R2403, R2404, R2405, R2406, R2407, R2408, R2409, R2410, R2411, R2412, R2413, R2414, R2415, R2416, R2417, R2418, R2419, R2420, R2421, R2422, R2423, R2424, R2425, R2426, R2427, R2428, R2429, R2430, R2431, R2432, R2433, R2434, R2435, R2436, R2437, R2438, R2439, R2440, R2441, R2442, R2443, R2444, R2445, R2446, R2447, R2448, R2449, R2450, R2451, R2452, R2453, R2454, R2455, R2456, R2457, R2458, R2459, R2460, R2461, R2462, R2463, R2464, R2465, R2466, R2467, R2468, R2469, R2470, R2471, R2472, R2473, R2474, R2475, R2476, R2477, R2478, R2479, R2480, R2481, R2482, R2483, R2484, R2485, R2486, R2487, R2488, R2489, R2490, R2491, R2492, R2493, R2494, R2495, R2496, R2497, R2498, R2499, R2500, R2501, R2502, R2503, R2504, R2505, R2506, R2507, R2508, R2509, R2510, R2511, R2512, R2513, R2514, R2515, R2516, R2517, R2518, R2519, R2520, R2521, R2522, R2523, R2524, R2525, R2526, R2527, R2528, R2529, R2530, R2531, R2532, R2533, R2534, R2535, R2536, R2537, R2538, R2539, R2540, R2541, R2542, R2543, R2544, R2545, R2546, R2547, R2548, R2549, R2550, R2551, R2552, R2553, R2554, R2555, R2556, R2557, R2558, R2559, R2560, R2561, R2562, R2563, R2564, R2565, R2566, R2567, R2568, R2569, R2570, R2571, R2572, R2573, R2574, R2575, R2576, R2577, R2578, R2579, R2580, R2581, R2582, R2583, R2584, R2585, R2586, R2587, R2588, R2589, R2590, R2591, R2592, R2593, R2594, R2595, R2596, R2597, R2598, R2599, R2600, R2601, R2602, R2603, R2604, R2605, R2606, R2607, R2608, R2609, R2610, R2611, R2612, R2613, R2614, R2615, R2616, R2617, R2618, R2619, R2620, R2621, R2622, R2623, R2624, R2625, R2626, R2627, R2628, R2629, R2630, R2631, R2632, R2633, R2634, R2635, R2636, R2637, R2638, R2639, R2640, R2641, R2642, R2643, R2644, R2645, R2646, R2647, R2648, R2649, R2650, R2651, R2652, R2653, R2654, R2655, R2656, R2657, R2658, R2659, R2660, R2661, R2662, R2663, R2664, R2665, R2666, R2667, R2668, R2669, R2670, R





MAIN XI SCHEMATIC DIAGRAM

1	2
3	4



9.3. VOLTAGE CHART

NOTE:  
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,  
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN P.C.B.

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
IC1101		IC1108		49	15.3	3	0	58	15.3	12	3.3	67	3.4	21	0	27	1.0	33	0.5
1	3.3	1	4.9	50	6.8	4	0	59	15.3	13	1.9	68	1.7	22	15.3	28	1.1	34	15.3
2	2.5	2	0	51	0	5	---	60	0	14	0	69	1.6	23	8.1	29	1.0	35	6.6
3	3.3	3	0	52	0	6	3.4	61	0	15	0	70	0.5	24	0	30	---	36	0
4	0	4	0	53	0	7	3.4	62	0	16	0	71	0	25	15.3	31	7.0	37	3.4
5	1.2	5	3.4	54	7.0	8	3.2	63	0	17	0	72	0	26	1.1	32	7.6	38	0
6	0	IC2001		55	15.3	9	3.1	64	0	18	6.1	73	0	27	1.1	33	0.5	39	3.4
7	3.3	1	3.4	56	7.0	10	3.4	65	0.5	19	15.3	74	3.4	28	1.1	34	15.3	40	3.2
8	5.0	2	0	57	0	11	3.3	66	---	20	6.1	75	3.4	29	1.2	35	0	41	1.9
IC1102		3	0	58	15.3	12	3.3	67	3.4	21	0	76	3.4	30	---	36	0	42	1.9
1	3.3	4	0	59	15.3	13	1.9	68	1.7	22	6.2	77	1.0	31	7.1	37	3.4	43	1.7
2	1.4	5	---	60	0	14	0	69	1.6	23	15.3	78	1.0	32	7.7	38	0	44	3.4
3	1.9	6	3.4	61	0	15	0	70	0.5	24	0	79	1.1	33	0.5	39	3.4	45	0
4	0	7	3.4	62	0	16	0	71	0	25	0	80	1.3	34	15.3	40	3.2	46	0
5	2.6	8	3.2	63	0	17	0	72	0	26	6.8	81	1.3	35	6.5	41	1.9	47	3.4
6	2.3	9	3.1	64	0	18	6.1	73	0	27	15.3	82	1.2	36	0	42	1.9	48	3.4
7	3.3	10	3.4	65	0.5	19	15.3	74	3.4	28	6.8	83	1.3	37	3.4	43	1.7	IC2007	
8	5.0	11	3.3	66	---	20	6.1	75	3.4	29	0	84	1.4	38	0	44	3.4	1	3.4
IC1103		12	3.3	67	3.4	21	0	76	3.4	30	6.8	85	1.3	39	3.4	45	0	2	15.6
1	9.0	13	1.9	68	1.7	22	6.2	77	1.0	31	15.3	86	1.5	40	3.2	46	3.4	3	0
2	4.5	14	0	69	1.6	23	15.3	78	1.0	32	6.8	87	0	41	1.9	47	0	4	15.4
3	1.3	15	0	70	0.5	24	0	79	1.1	33	0	88	0	42	1.9	48	3.4	5	1.1
4	1.3	16	0	71	0	25	0	80	1.3	34	6.8	89	0	43	1.7	IC2006		IC2504	
5	0.9	17	0	72	0	26	6.8	81	1.3	35	15.3	90	1.0	44	3.4	44	3.4	1	3.1
6	0	18	6.1	73	0	27	15.3	82	1.2	36	6.8	91	1.0	45	0	46	0	2	0.4
7	7.7	19	15.3	74	3.4	28	6.8	83	1.3	37	0	92	1.2	46	0	47	0	3	3.1
8	9.0	20	6.1	75	3.4	29	0	84	1.4	38	0	93	1.3	47	0	48	3.4	4	0
IC1104		21	0	76	3.4	30	6.8	85	1.3	39	0	94	1.3	48	3.4	IC2005		5	3.3
1	8.9	22	6.2	77	1.0	31	15.3	86	1.5	40	6.8	95	0.3	44	3.4	1	2.1	6	1.7
2	4.5	23	15.3	78	1.0	32	6.8	87	0	41	15.3	96	1.3	45	0	7	0	7	0
3	1.2	24	0	79	1.1	33	0	88	0	42	6.8	97	1.4	46	0	8	2.3	8	2.3
4	1.3	25	0	80	1.3	34	6.8	89	0	43	0	98	1.3	47	0	9	0	9	0
5	0.8	26	6.8	81	1.3	35	15.3	90	1.0	44	6.8	99	1.5	48	3.4	10	1.6	10	1.6
6	0	27	15.3	82	1.2	36	6.8	91	1.0	45	15.3	100	3.4	49	15.3	11	0	11	0
7	5.6	28	6.8	83	1.3	37	0	92	1.2	46	6.8	IC2004		50	6.8	12	3.4	12	3.4
8	8.9	29	0	84	1.4	38	0	93	1.3	47	0	1	2.1	51	0	13	15.3	13	15.3
IC1105		30	6.8	85	1.3	39	0	94	1.3	48	6.8	2	3.2	52	0	14	0	14	0
1	9.0	31	15.3	86	1.5	40	6.8	95	0.3	49	15.3	3	3.1	53	0	15	0.1	15	0.1
2	1.9	32	6.8	87	0	41	15.3	96	1.3	50	6.8	4	0	54	7.0	16	7.7	16	7.7
3	0	33	0	88	0	42	6.8	97	1.4	51	0	5	3.3	55	15.3	17	0	17	0
4	0.9	34	6.8	89	0	43	0	98	1.3	52	0	6	1.7	56	7.0	18	3.4	18	3.4
5	3.7	35	15.3	90	1.0	44	6.8	99	1.5	53	0	7	0	57	0	19	7.1	19	7.1
IC1106		36	6.8	91	1.0	45	15.3	100	3.4	54	7.0	8	2.3	58	15.3	20	0.9	20	0.9
1	6.9	37	0	92	1.2	46	6.8	IC2003		55	15.3	9	0	59	15.3	21	0	21	0
2	0	38	0	93	1.3	47	0	1	3.4	56	7.0	10	1.6	60	0	22	15.3	22	15.3
3	1.4	39	0	94	1.3	48	6.8	2	0	57	0	11	0	61	0	23	8.1	23	8.1
4	5.1	40	6.8	95	0.3	49	15.3	3	0	58	15.3	12	3.4	62	0	24	0	24	0
5	7.0	41	15.3	96	1.3	50	6.8	4	0	59	15.3	13	15.3	63	0	25	15.3	25	15.3
IC1107		42	6.8	97	1.4	51	0	5	---	60	0	14	0	64	0	26	1.0	26	1.0
1	9.0	43	0	98	1.3	52	0	6	3.4	61	0	15	0.1	65	0.5	27	1.0	27	1.0
2	5.1	44	6.8	99	1.5	53	0	7	3.4	62	0	16	7.7	66	---	28	1.1	28	1.1
3	0	45	15.3	100	3.4	54	7.0	8	3.2	63	0	17	7.7			29	1.1	29	1.1
4	0.9	46	6.8	IC2002		55	15.3	9	3.1	64	0	18	7.1			30	---	30	---
5	3.6	47	0	1	3.4	56	7.0	10	3.4	65	0.5	19	7.1			31	7.0	31	7.0
		48	6.8	2	0	57	0	11	3.3	66	---	20	0.9			32	7.6	32	7.6

PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K VOLTAGE CHART

NOTE:  
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,  
REFER TO BEGINNING OF SCHEMATIC SECTION.

PIN NO.	VOLTAGE
18	1.6
19	1.6
20	0
21	1.8
22	---
23	0
24	0
25	---
26	1.7
27	1.6
28	0
29	3.3
30	1.3
31	1.8
32	0
33	1.5
34	1.7
35	---
36	---
37	0
38	1.7
39	0
40	1.8
41	0
42	1.7
43	1.7
44	1.7
45	1.7
46	---
47	---
48	---
49	---
50	3.3
51	1.8
52	0
53	3.3
54	1.3
55	0
56	0
57	---
58	---
59	3.3
60	---
61	---
62	---
63	---
64	---
65	---
66	---
67	1.7
68	3.3
69	0
70	0
71	3.3
72	1.5

PIN NO.	VOLTAGE
73	1.5
74	---
75	---
76	0
77	0
78	1.5
79	1.5
80	1.5
IC4002	
1	3.3
2	---
3	1.3
4	0
5	1.8
6	---
7	---
8	5.1
IC4003	
1	4.5
2	0
3	4.5
4	0
5	4.5
6	4.5
7	0
8	9.0
IC4004	
1	1.9
2	---
3	0
4	0.6
5	3.4
6	0
7	3.4
IC4501	
1	13.0
2	---
3	0
4	0
5	3.3
6	1.7
7	12.4
8	1.7
9	1.2
10	0
11	0
12	3.3
13	0
14	0
15	0
16	1.7
17	12.4
18	1.7
19	0
20	0

PIN NO.	VOLTAGE
21	13.0
22	13.0
23	13.0
24	22.5
25	0
26	20.9
27	20.9
28	10.4
29	0
30	0
31	10.4
32	20.9
33	22.5
34	22.5
35	20.9
36	10.4
37	0
38	0
39	10.4
40	20.9
41	20.9
42	0
43	22.5
44	13.1
IC5500	
1	0
2	0
3	0
4	0
5	4.6
6	4.6
7	4.6
8	4.6
IC5501	
1	0
2	0
3	0
4	0
5	4.6
6	4.6
7	4.6
8	4.6
IC5503	
1	0
2	3.3
3	3.3
4	3.3
5	0
6	3.3
7	3.3
8	0
9	3.3
10	3.3
11	3.3
12	1.2

PIN NO.	VOLTAGE
13	3.3
14	3.3
15	0
16	3.3
17	3.3
18	3.3
19	3.3
20	3.3
21	3.3
22	0
23	3.3
24	3.3
25	3.3
26	3.3
27	3.3
28	3.3
29	0
30	3.3
31	3.3
32	0
33	3.3
34	3.3
35	3.3
36	3.3
37	3.3
38	3.3
39	3.3
40	3.3
41	0
42	3.3
43	3.3
44	0
45	3.3
46	3.3
47	3.3
48	3.3
IC5504	
1	0
2	0
3	0
4	0
5	3.3
6	3.3
7	3.3
8	3.3
IC5506	
1	3.4
2	---
3	0
4	2.1
5	3.3
6	0
7	5.1
IC5508	
1	3.3

PIN NO.	VOLTAGE
2	0
3	1.3
4	1.8
5	3.3
IC5509	
1	1.8
2	---
3	1.3
4	0
5	3.3
6	---
7	---
8	3.3
IC5510	
1	0.6
2	0
3	0
4	---
5	---
6	---
7	1.7
8	1.7
9	---
10	0
11	3.1
12	3.1
13	0
14	0
15	3.4
16	0
17	0
18	0
19	3.4
20	0
21	3.3
22	0
23	1.9
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0
32	0
33	0
34	0
35	3.4
36	---
37	---
38	0
39	0
40	1.2
41	0

PIN NO.	VOLTAGE
42	2.2
43	0
44	1.2
45	0.8
46	0
47	0
48	1.6
49	0
50	3.4
51	1.6
52	0
53	0
54	---
55	0
56	0
57	1.8
58	0
59	---
60	---
61	---
62	3.4
63	3.4
64	0
65	1.7
66	1.5
67	3.4
68	1.9
69	0
70	0.8
71	1.9
72	0
73	0
74	0
75	0
76	0
77	0
78	0.2
79	0
80	0
81	0
82	0
83	0
84	3.4
85	1.6
86	2.0
87	0
88	3.4
89	0.9
90	1.8
91	1.2
92	0.7
93	0
94	0.2
95	0
96	0

PIN NO.	VOLTAGE
97	0.5
98	0
99	0.3
100	0
101	1.9
102	1.9
103	0
104	1.9
105	3.4
106	3.4
107	3.4
108	3.4
109	1.9
110	0
111	3.4
112	3.4
113	3.4
114	0
115	3.4
116	3.4
117	0
118	3.4
119	3.4
120	0
121	3.4
122	3.4
123	3.4
124	3.1
125	1.9
126	0
127	3.4
128	3.4
129	3.4
130	0
131	3.4
132	3.4
133	0
134	3.4
135	3.4
136	0
137	3.4
138	3.4
139	3.4
140	0
141	1.9
142	1.9
143	0
144	1.7
IC5511	
1	0.1
2	3.4
3	3.4
4	0
5	4.7
6	4.7

PIN NO.	VOLTAGE
7	0.1
8	5.2
IC5512	
1	3.3
2	3.4
3	3.4
4	0
5	4.7
6	4.7
7	3.4
8	5.2
IC6002	
1	5.0
2	0
3	---
4	---
IC6003	
1	5.0
2	0
3	3.1
4	---
IC6004	
1	3.1
2	0
3	3.3
4	0
5	3.3
6	3.3
7	3.3
8	0
9	0
10	3.3
11	0
12	3.3
13	3.3
14	0
15	3.3
16	3.3
17	0
18	3.1
19	2.4
20	3.2
21	0
22	3.2
23	0
24	0
25	3.2
26	3.3
27	3.3
28	3.4
29	3.3
30	3.0
31	3.4
32	1.9
33	3.4

PIN NO.	VOLTAGE
34	3.3
35	3.4
36	3.3
37	3.3
38	0
39	3.4
40	3.4
41	---
42	---
43	---
44	---
45	0
46	3.4
47	0
48	3.3
49	3.4
50	3.4
51	0
52	0
53	3.4
54	3.4
55	3.4
56	1.3
57	3.1
58	0
59	---
60	---
61	---
62	---
63	3.4
64	3.4
65	0
66	3.2
67	3.3
68	3.4
69	0
70	0
71	0
72	0
73	0
74	0
75	---
76	---
77	---
78	0
79	1.9
80	---
81	3.4
82	0
83	0
84	0
85	3.4
86	1.3
87	0
88	3.4

PIN NO.	VOLTAGE
89	0.1
90	3.0
91	3.1
92	3.3
93	3.3
94	3.4
95	3.4
96	3.4
97	3.3
98	3.3
99	0
100	0
101	0
102	0
103	0
104	0
105	3.4
106	0
107	0
108	3.4
109	0
110	0
111	1.8
112	0.6
113	0.6
114	3.4
115	3.4
116	3.3
117	2.9
118	0
119	0
120	3.4
121	0
122	3.3
123	0
124	3.3
125	0
126	0
127	0
128	0
IC6005	
1	0
2	0
3	0
4	0
5	3.3
6	3.3
7	3.3
8	3.3
IC8004	
1	1.2
2	3.3
3	0.1
4	1.6
5	3.3

PIN NO.	VOLTAGE
6	0
7	1.3
8	---
9	1.5
10	---
11	0
12	0
13	3.3
14	3.3
15	3.3
16	1.2
IC8005	
1	3.3
2	1.8
3	0
4	0
5	0
IC8201	
1	0
2	0
3	0
4	0
5	3.4
6	3.4
7	0
8	3.4
IC8404	
1	---
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	3.3
14	3.3
15	0
16	3.3
17	---
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	---
28	---

PIN NO.	VOLTAGE
29	3.3
30	---
31	0
32	3.3
33	0
34	3.3
35	0
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	3.3
44	0
45	0
46	0
47	0
48	0
49	0
50	0
51	0
52	0
53	3.3
54	0
55	0
56	0
IC8802	
1	0
2	0
3	---
4	---
5	---
6	---
7	3.3
8	0
9	0
10	1.2
11	0
12	---
13	3.3
14	0
15	---
16	---
17	3.3
18	0
19	0
20	---
21	---</

NOTE:  
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,  
REFER TO BEGINNING OF SCHEMATIC SECTION.

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
27	1.2	82	---	137	1.2	Q4506		3	0	3	6.5	21	0.9	3	10.5	3	0	TP1124	0
28	0	83	0	138	0	E	9.0	4	0	4	6.8	22	0.9	4	10.5	4	0	TP1125	0
29	3.3	84	1.2	139	0	C	0	5	7.1	5	6.8	23	0.9	5	10.5	5	3.3	TP2001	6.2
30	0	85	---	140	3.3	B	8.9	6	3.3	6	6.8	24	0.9	6	10.5	6	0	TP2002	6.0
31	3.3	86	---	141	0	Q4507		7	31.5	7	6.8	25	0.9	CN5503		7	3.3	TP2003	6.1
32	1.7	87	0	142	3.3	E	0	8	3.1	8	6.8	26	0	1	3.4	8	3.3	TP2004	6.8
33	0	88	3.3	143	0	C	8.9	9	9.1	9	6.8	27	0	2	0	9	3.3	TP2005	6.8
34	1.6	89	---	144	0	B	0	10	9.1	10	6.8	28	0	3	3.4	10	3.3	TP2006	6.8
35	0	90	---			Q4508		11	9.1	11	6.8	29	7.1	4	3.4	11	3.3	TP2007	15.4
36	1.6	91	0	Q1102		E	9.0	12	0	12	6.8	30	7.1	5	0	12	3.3	TP2008	15.3
37	1.3	92	3.3	E	0	C	0	13	0	13	6.8	31	7.7	6	3.4	CN8801		TP2009	3.4
38	0	93	0	C	3.4	B	8.9	14	0	14	6.8	32	7.7	7	3.4	1	2.3	TP2011	6.2
39	1.3	94	0	B	0.1	Q5500		CN1102		15	6.8	33	0.1	8	0	2	4.2	TP2012	6.0
40	2.0	95	0	Q1106		E	0	1	3.1	16	15.4	34	0	9	3.4	3	0	TP2013	6.1
41	2.0	96	0	1	3.4	C	0.1	2	3.1	17	0.5	35	15.4	10	3.4	4	31.6	TP2014	6.8
42	0	97	1.2	2	3.4	B	0.7	CN2001		18	7.5	36	6.1	11	0	5	2.3	TP2015	6.8
43	3.3	98	0	3	5.6	Q5501		1	6.2	19	6.9	CN3001		12	3.4	6	5.1	TP2016	6.8
44	3.3	99	0	4	8.9	E	0	2	0.1	20	0	1	0	13	0	7	0	TP2019	3.4
45	3.3	100	3.3	5	3.4	C	0.1	3	6.5	21	0.9	2	5.1	14	0	8	5.1	TP2502	3.4
46	0	101	---	6	3.4	B	0.7	4	6.8	22	0.9	3	0	15	3.3	9	0	TP2503	0
47	0	102	---	Q3004		Q5502		5	6.8	23	0.8	4	0	16	3.3	10	1.8	TP2504	0
48	0	103	0	1	3.2	E	0	6	6.8	24	0.9	5	0	17	5.2	11	0	TP2505	1.5
49	3.3	104	1.2	2	3.3	C	3.4	7	6.8	25	0.9	6	0	18	0	12	2.9	TP2506	3.3
50	1.2	105	0	3	5.0	B	0	8	6.8	26	0	7	0	19	0	13	0	TP2507	3.4
51	0	106	0	4	3.2	Q5503		9	6.7	27	0	8	0	20	3.4	14	0	TP2508	3.4
52	0	107	0	5	3.3	E	0	10	6.8	28	0	9	0	21	0	15	0	TP2509	3.2
53	0	108	0.4	6	5.0	C	3.4	11	6.8	29	7.1	10	0	22	3.4	16	0	TP2510	3.1
54	0	109	3.3	Q4001		B	0	12	6.8	30	7.1	11	0	23	---	17	5.1	TP2511	3.2
55	0	110	0	E	0	Q5504		13	6.8	31	7.7	12	0	24	0	18	0	TP2512	3.4
56	3.3	111	0	C	0.1	E	0	14	6.8	32	7.7	13	0	25	3.3	19	5.1	TP2513	3.2
57	1.2	112	0	B	0	C	4.6	15	6.8	33	0.1	14	0	26	0	20	3.3	TP2514	1.0
58	0	113	0	Q4002		B	0	16	15.4	34	0	15	0	27	3.3			TP2515	1.7
59	0	114	0	E	0	Q5505		17	0.5	35	15.4	16	0	28	3.3	TP1101	3.3	TP2516	1.5
60	0	115	0	C	3.4	E	0	18	7.5	36	6.0	17	0	29	---	TP1102	9.0	TP2517	1.1
61	3.3	116	1.2	B	0	C	4.6	19	6.9	CN2003		18	4.2	30	---	TP1103	9.0	TP2518	1.5
62	0	117	3.2	Q4501		B	0	20	15.4	1	6.1	19	4.6	CN6003		TP1104	6.9	TP2519	1.2
63	0	118	3.2	E	13.1	Q5508		21	0.9	2	0.1	20	4.6	1	4.7	TP1105	7.0	TP2520	0.8
64	0	119	0	C	20.7	E	0	22	0.8	3	6.7	21	2.2	2	3.4	TP1106	3.3	TP2521	2.1
65	1.2	120	3.3	B	13.6	C	0.1	23	0.8	4	6.8	22	2.2	3	0	TP1107	3.4	TP2522	0.8
66	0	121	0	Q4502		B	0.6	24	0.8	5	6.8	23	4.5	4	3.4	TP1108	5.0	TP2523	2.2
67	0	122	0	E	3.3	Q5514		25	0.9	6	6.8	24	4.5	5	---	TP1109	1.9	TP3001	0
68	0	123	0	C	0	E	4.2	26	0	7	6.8	25	0	6	0	TP1110	1.9	TP3002	5.1
69	0	124	1.2	B	3.3	C	0	27	0	8	6.8	26	0	7	0	TP1111	3.3	TP3003	0
70	0	125	---	Q4503		B	3.6	28	0	9	6.8	27	0	8	0	TP1112	3.4	TP3004	0
71	0	126	0	E	0	Q5515		29	7.1	10	6.8	28	1.3	CN6005		TP1113	1.2	TP3005	0
72	0	127	---	C	12.4	E	4.2	30	7.1	11	6.8	29	2.9	1	0	TP1114	1.2	TP3006	0
73	0	128	3.3	B	0.1	C	0	31	7.7	12	6.8	30	3.4	2	5.1	TP1115	5.1	TP3007	0
74	0	129	0	Q4504		B	3.6	32	7.7	13	6.8	31	1.3	3	5.2	TP1116	5.1	TP3008	0
75	1.2	130	0	E	0	Q5516		33	0.1	14	6.8	32	5.0	4	---	TP1117	5.2	TP3009	0
76	0	131	0	C	0	E	4.0	34	0	15	6.8	33	5.0	5	---	TP1118	5.1	TP3010	0
77	0	132	3.3	B	0.7	C	0	35	15.4	16	15.4	34	9.0	6	0	TP1119	5.2	TP3011	0
78	---	133	3.3	Q4505		B	3.3	36	6.2	17	0.5	35	0	7	0.1	TP1120	3.3	TP3012	0
79	0	134	0	E	0	Q5517		CN2002		18	7.6	CN4501		CN8201		TP1121	3.4	TP3013	4.1
80	3.3	135	0	C	8.9	E	2.5	1	6.0	19	6.9	1	3.4	1	3.3	TP1122	3.3	TP3014	3.7
81	---	136	0	B	0	C	0	2	20.9	20	15.4	2	0	2	0	TP1123	3.4	TP3015	3.5

PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

VOLTAGE CHART

NOTE:  
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,  
REFER TO BEGINNING OF SCHEMATIC SECTION.

## POWER P.C.B.

PIN NO.	VOLTAGE
TP5051	3.4
TP5052	3.3
TP5053	3.4
TP5054	0
TP5055	3.4
TP5056	1.8
TP5057	1.9
TP5058	1.8
TP5059	1.9
TP5060	3.4
TP5515	3.2
TP5516	3.3
TP5517	0
TP6001	3.4
TP6002	3.4
TP6003	3.3
TP6004	0
TP6005	0
TP6008	---
TP6009	3.4
TP6010	3.4
TP6011	3.4
TP6012	0
TP6013	0
TP6014	3.4
TP6015	3.4
TP6016	3.3
TP6017	0
TP8001	0.4
TP8002	0
TP8003	3.3
TP8004	0
TP8005	0
TP8006	0
TP8201	3.3
TP8202	3.4
TP8203	3.3
TP8204	3.4
TP8205	3.3
TP8206	3.4
TP8401	0
TP8402	0
TP8403	3.4
TP8404	0
TP8405	3.4
TP8406	3.3
TP8407	3.3
TP8801	0.1
TP8802	0
TP8803	0.1
TP8804	0.1
TP8805	0.1
TP8806	5.1
TP8807	0.6
TP8808	---

[illegible]

PIN NO.	VOLTAGE
IC1001	
1	3.1
2	2.3
3	0
4	19.7
5	0
6	---
7	154.0
8	---
9	156.0
IC1002	
1	7.1
2	6.1
3	0
4	2.3
IC1003	
1	2.4
2	0
3	6.1
Q801	
E	0
C	0
B	0.7
Q803	
E	0
C	3.3
B	0
Q804	
E	0
C	0
B	0.6
Q805	
E	0
C	0.6
B	0
Q806	
E	0
C	0
B	0.7
Q1001	
E	12.5
C	20.7
B	13.2
CN1003	
1	20.9
2	20.9
3	0
4	0
5	7.1
6	3.3
7	31.5
8	3.1
9	9.1

[illegible]

## SD/HDMI P.C.B.

PIN NO.	VOLTAGE
IC9801	
1	0
2	3.3
3	3.3
4	3.3
5	0
6	3.3
7	3.3
8	0
9	3.3
10	3.3
11	3.3
12	1.2
13	3.3
14	3.3
15	0
16	3.3
17	3.3
18	3.3
19	3.3
20	3.3
21	3.3
22	0
23	3.3
24	0
25	3.3
26	3.3
27	0
28	3.3
29	0
30	3.3
31	3.3
32	0
33	3.3
34	3.3
35	3.3
36	0
37	3.3
38	3.3
39	3.3
40	3.3
41	0
42	3.3
43	3.3
44	0
45	3.3
46	3.3
47	0
48	3.3
IC9802	
1	0
2	0
3	0
4	0
5	4.6

PIN NO.	VOLTAGE
6	4.6
7	4.6
8	4.6
IC9803	
1	5.1
2	4.6
3	4.6
4	0
5	3.0
6	3.3
7	0
8	3.3
IC9804	
1	0
2	0.1
3	0.1
4	0
5	1.6
6	1.6
7	0
8	5.1
Q9801	
E	0
C	0
B	0
Q9802	
E	0
C	3.3
B	0
Q9804	
E	0
C	0
B	0
CN9802	
1	3.3
2	0
3	0
4	0
5	3.3
6	0
7	3.3
8	3.3
9	3.3
10	3.3
11	3.3
12	3.3
CN9804	
1	3.4
2	0
3	3.4
4	3.4
5	0
6	3.4

[illegible]

## REAR JACK P.C.B.

PIN NO.	VOLTAGE
IC2751	
1	9.0
2	9.0
3	0
4	8.0
5	0
IC2753	
1	9.0
2	9.0
3	0
4	0.1
5	0
IC2754	
1	9.0
2	9.0
3	0
4	7.1
5	1.4
IC4101	
1	---
2	---
3	0
4	0
5	9.0
6	4.6
7	4.6
8	0
9	0
10	4.6
11	4.6
12	0
13	4.6
14	4.6
15	4.6
16	4.6
17	4.6
18	---
19	---
20	4.6
21	4.6
22	8.9
23	4.6
24	0
25	4.6
26	4.6
27	---
28	---
29	0
30	---
31	---
32	---
33	---
34	5.1
35	5.0
36	5.0

PIN NO.	VOLTAGE
37	8.9
38	0
39	0
40	4.6
41	---
42	---
43	---
44	---
Q2751	
E	0
C	2.2
B	0.1
Q2752	
E	0
C	2.6
B	0.1
Q2753	
E	0
C	2.8
B	0.1
Q2754	
E	0
C	2.9
B	0.1
Q4101	
E	0
C	0
B	0
Q4102	
E	0
C	0
B	0
Q4103	
E	0
C	0
B	0
CN2751	
1	8.0
2	0
3	0
CN2752	
1	8.0
2	0
3	0
CN2753	
1	7.1
2	0
3	0.1
CN2754	
1	6.1
2	0
3	0.1

PIN NO.	VOLTAGE
CN3501	
1	0
2	5.1
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	4.2
19	4.6
20	4.6
21	2.2
22	2.2
23	4.5
24	4.5
25	0
26	0
27	0
28	1.3
29	2.9
30	3.4
31	1.3
32	5.0
33	5.0
34	9.0
35	0
CN3502	
1	0
2	0
3	0
4	0
5	0
6	0
TP2751	0.1
TP2752	0.1
TP2753	0.2
TP2754	0.1
TP2757	6.1
TP2758	7.1
TP2759	8.0

**VOLTAGE CHART**

PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K







## 10 Printed Circuit Board

## 10.1. MAIN P.C.B.

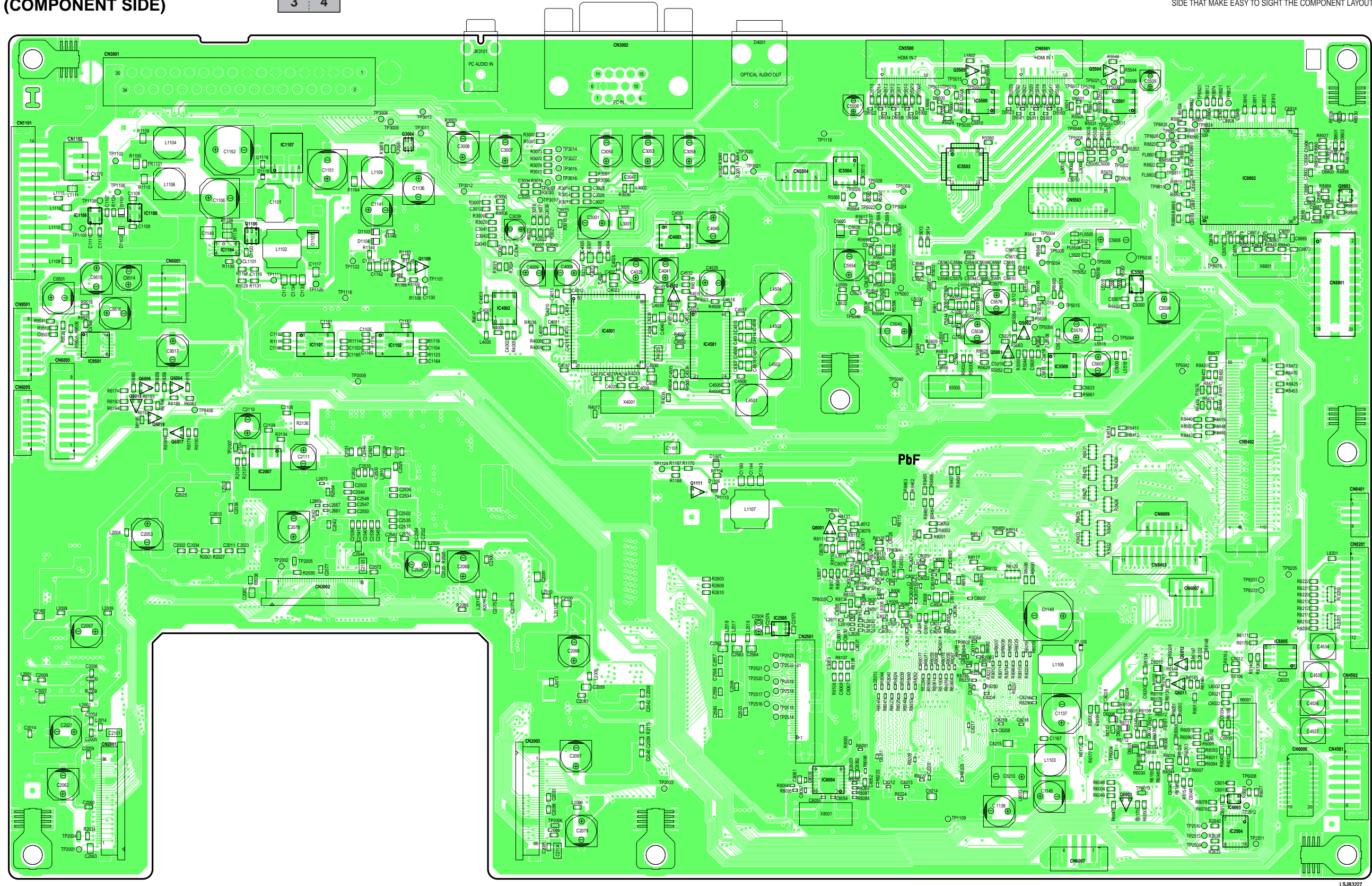
**MAIN P.C.B. LSEP3227A**

**(COMPONENT SIDE)**

1	2
3	4

NOTE: MULTILAYER P.C.B.

THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.



LSJB3227

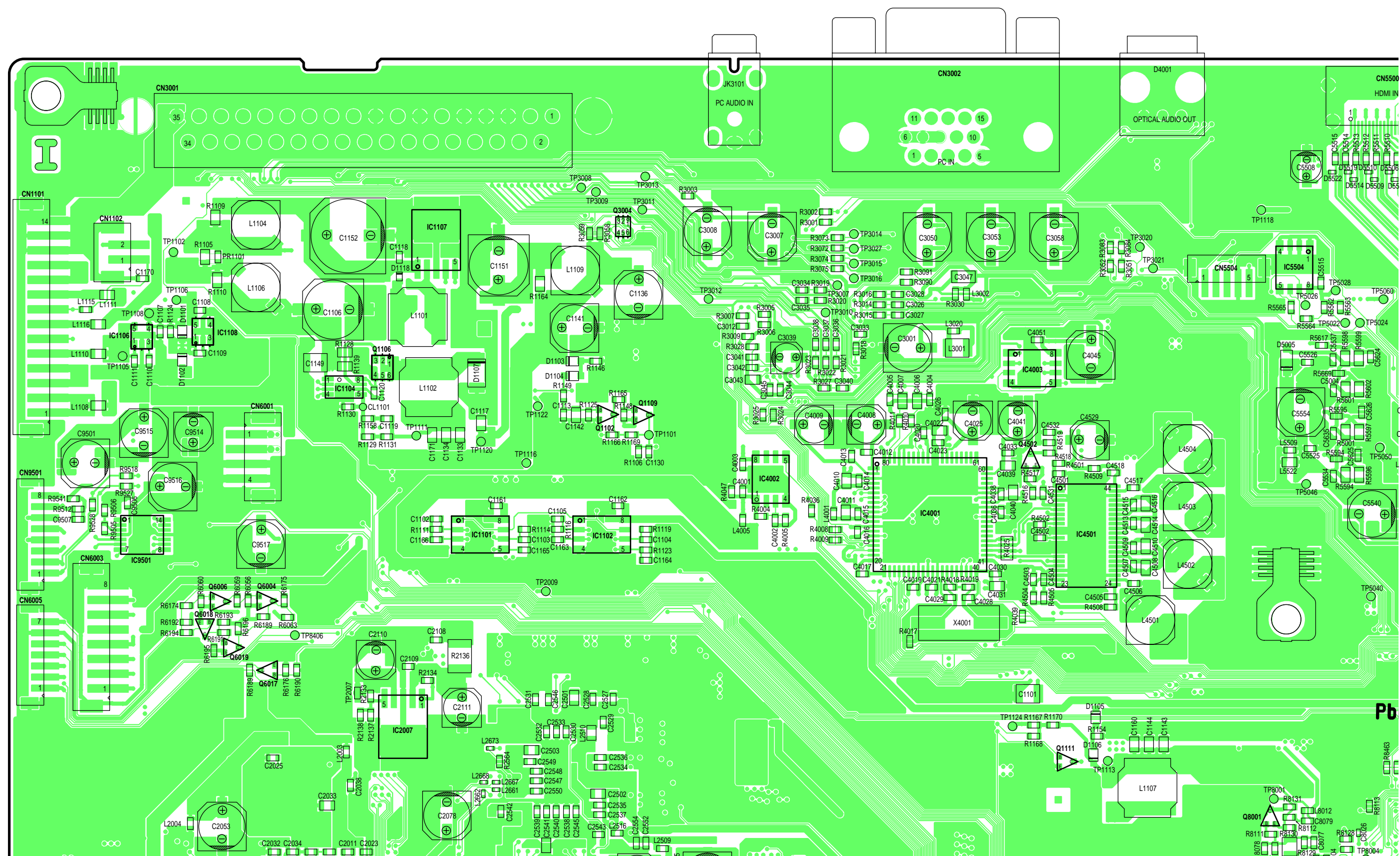
MAIN P.C.B. LSEP3227A

PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7

/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K

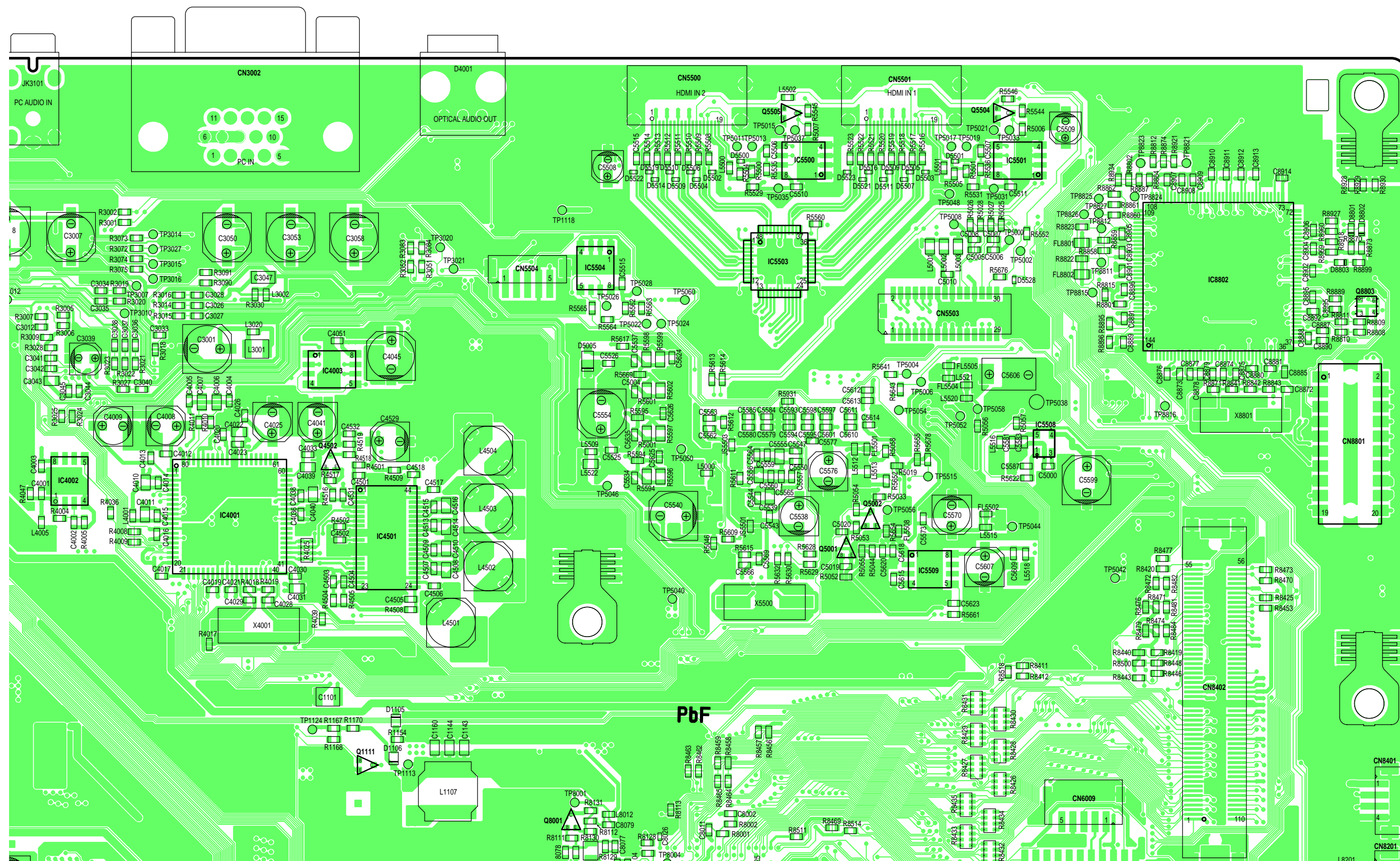
**MAIN P.C.B. LSEP3227A**  
**(COMPONENT SIDE)**

1	2
3	4



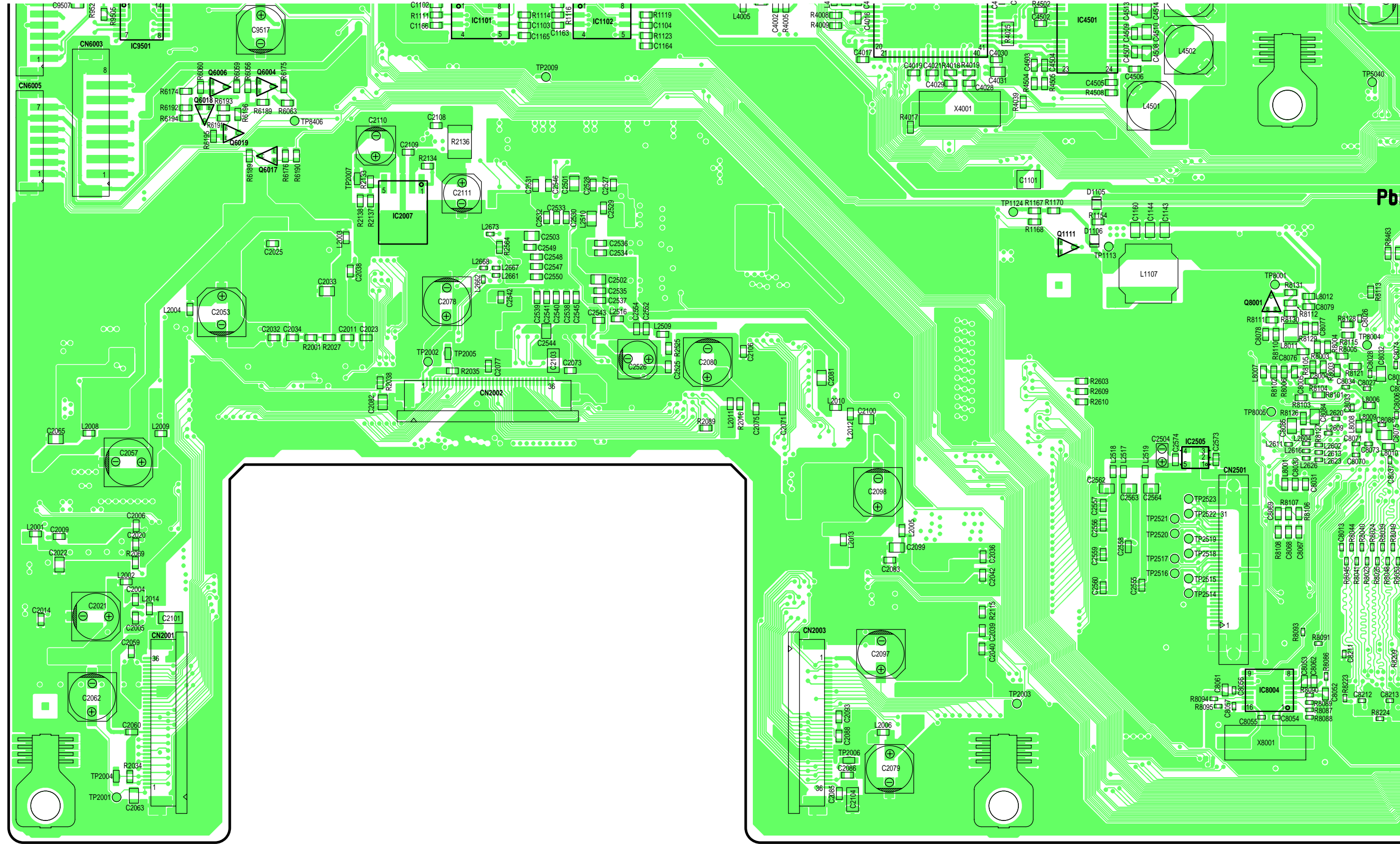


1	2
3	4



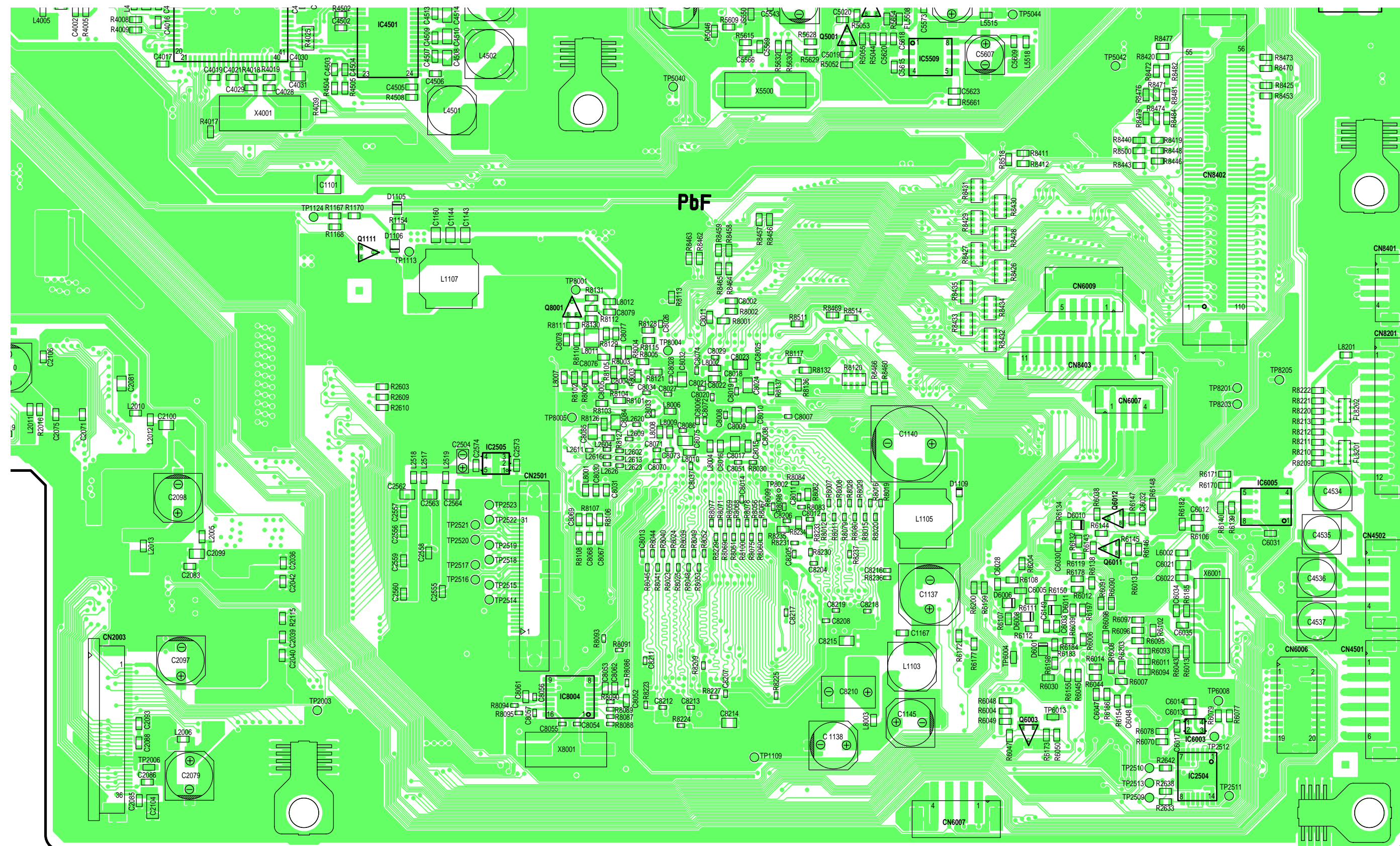
MAIN P.C.B. LSEP3227A  
(COMPONENT SIDE)

1	2
3	4





1	2
3	4



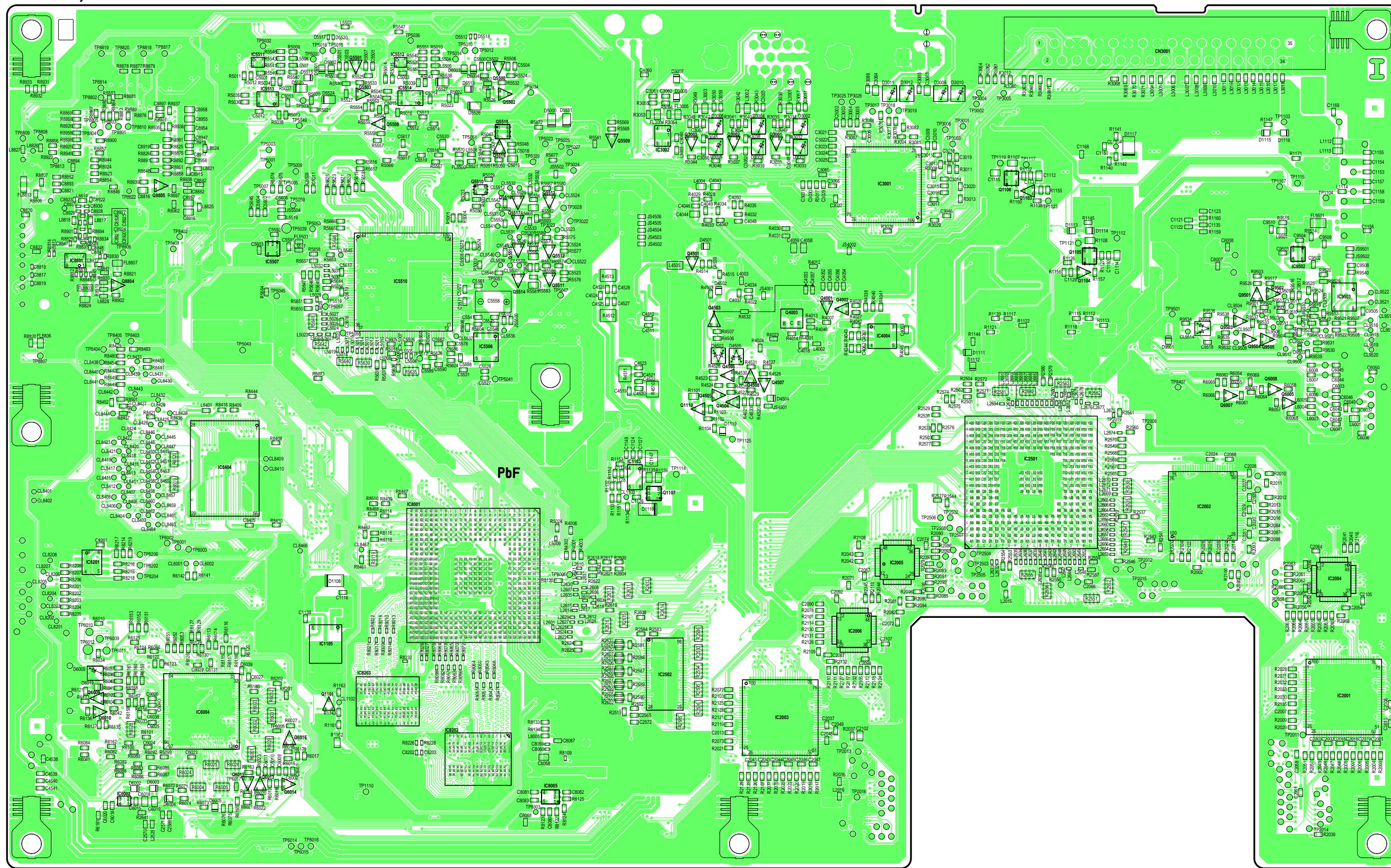


MAIN P.C.B. LSEP3227A

**(FOIL SIDE)**

NOTE: MULTILAYER P.C.B.

THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

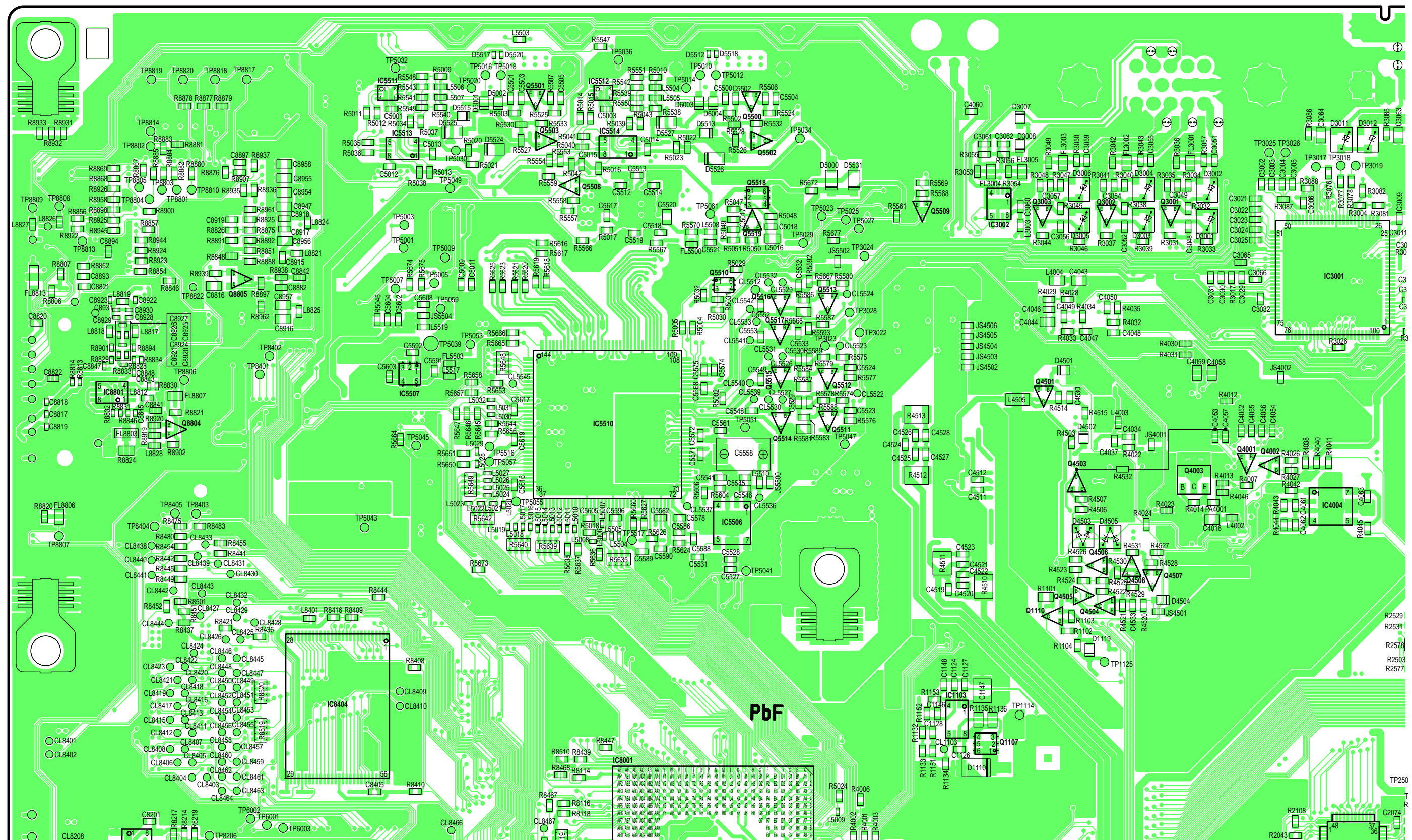


LSJB3227

MAIN P.C.B. LSXA0774/LSXA0790  
PT-56LCX70/PT-61LCX70/PT-50LCX7/PT-56LCX7  
/PT-61LCX7/PT-50LCX7K/PT-56LCX70-K/PT-61LCX70-K



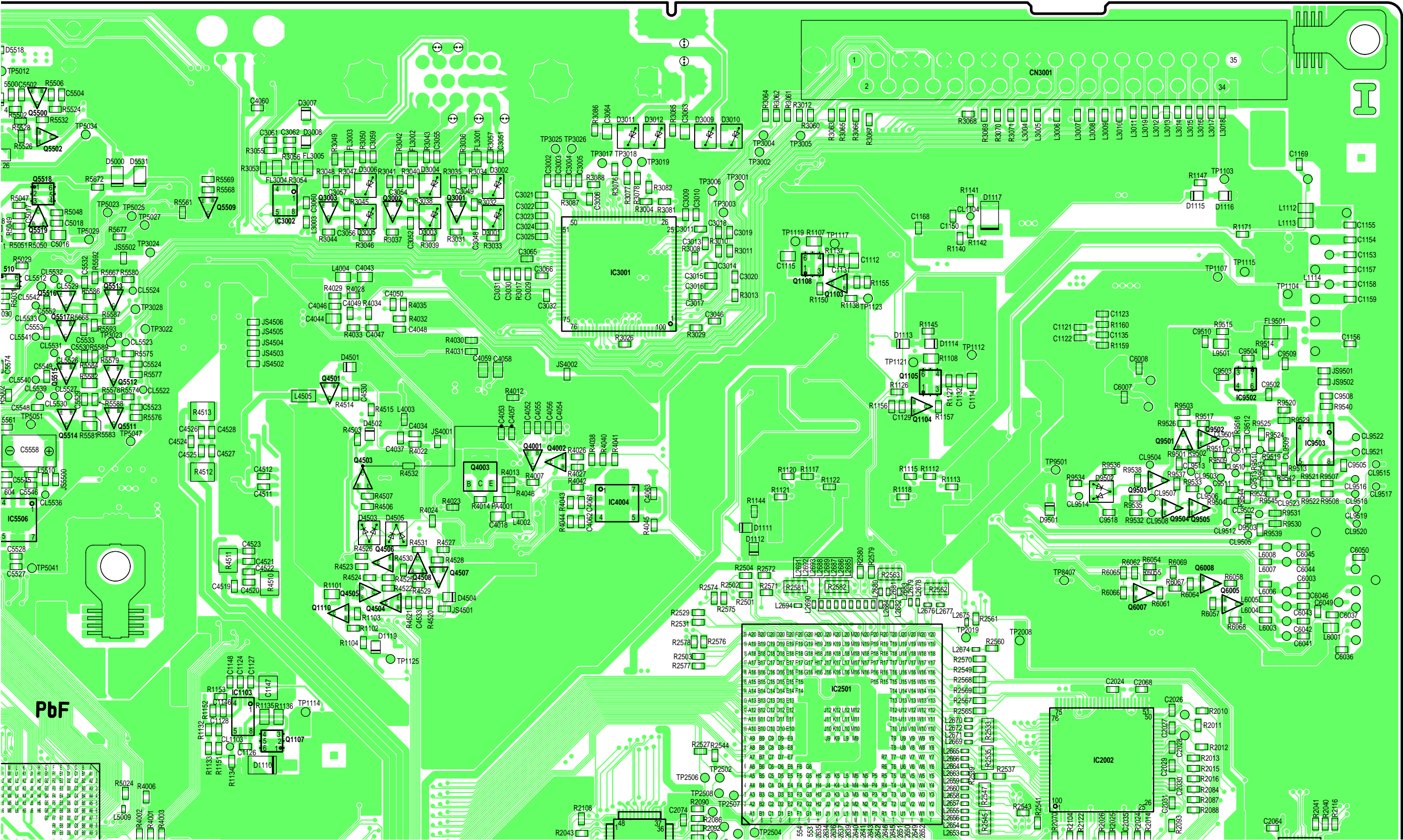
1	2
3	4





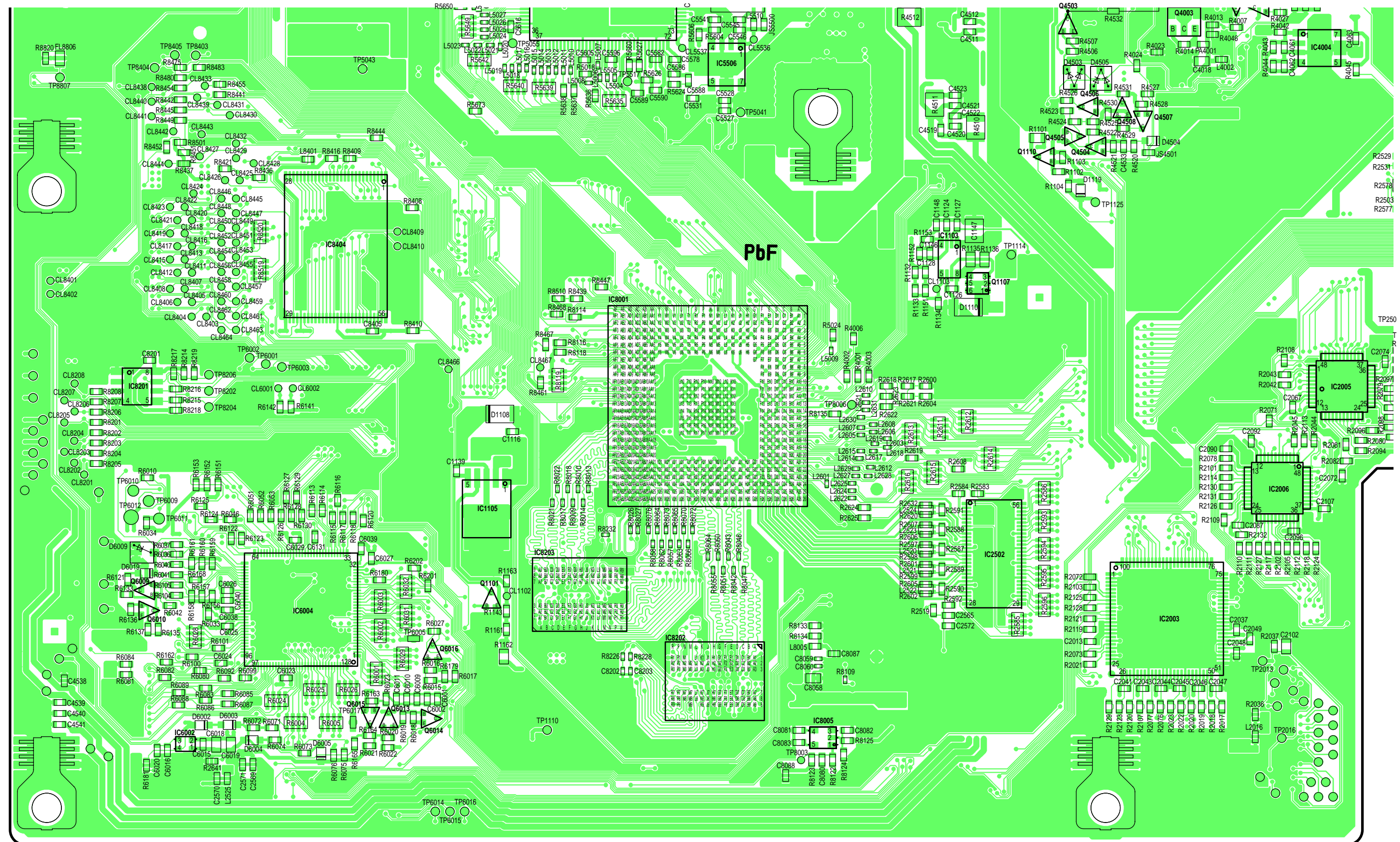
MAIN P.C.B. LSEP3227A  
(FOIL SIDE)

1	2
3	4





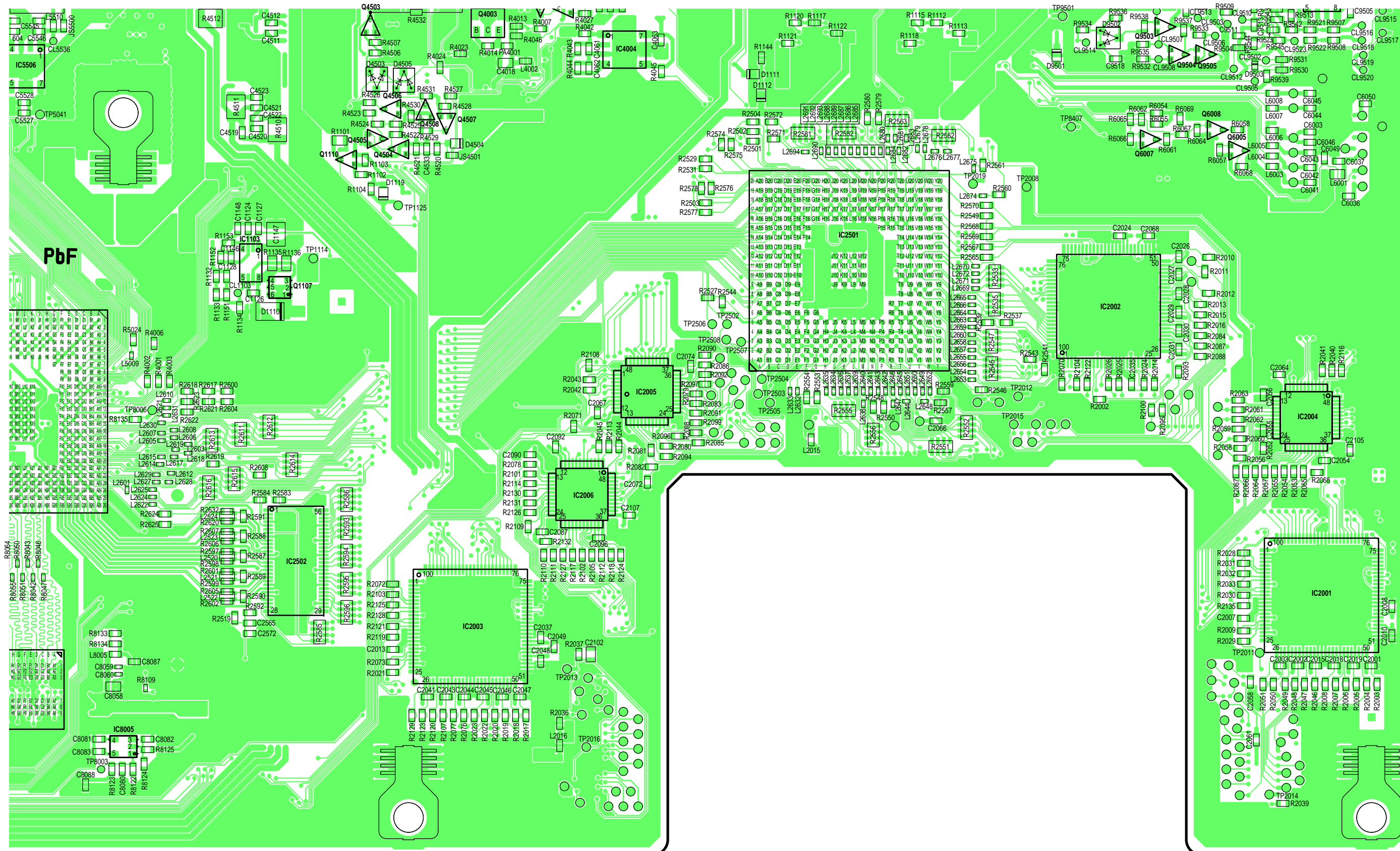
1	2
3	4





**MAIN P.C.B. LSEP3227A  
(FOIL SIDE)**






1	2
3	4









# 11 Appendix Information of Schematic Diagram

## 11.1. CHECKING POINT TABLE OF THE CSP IC

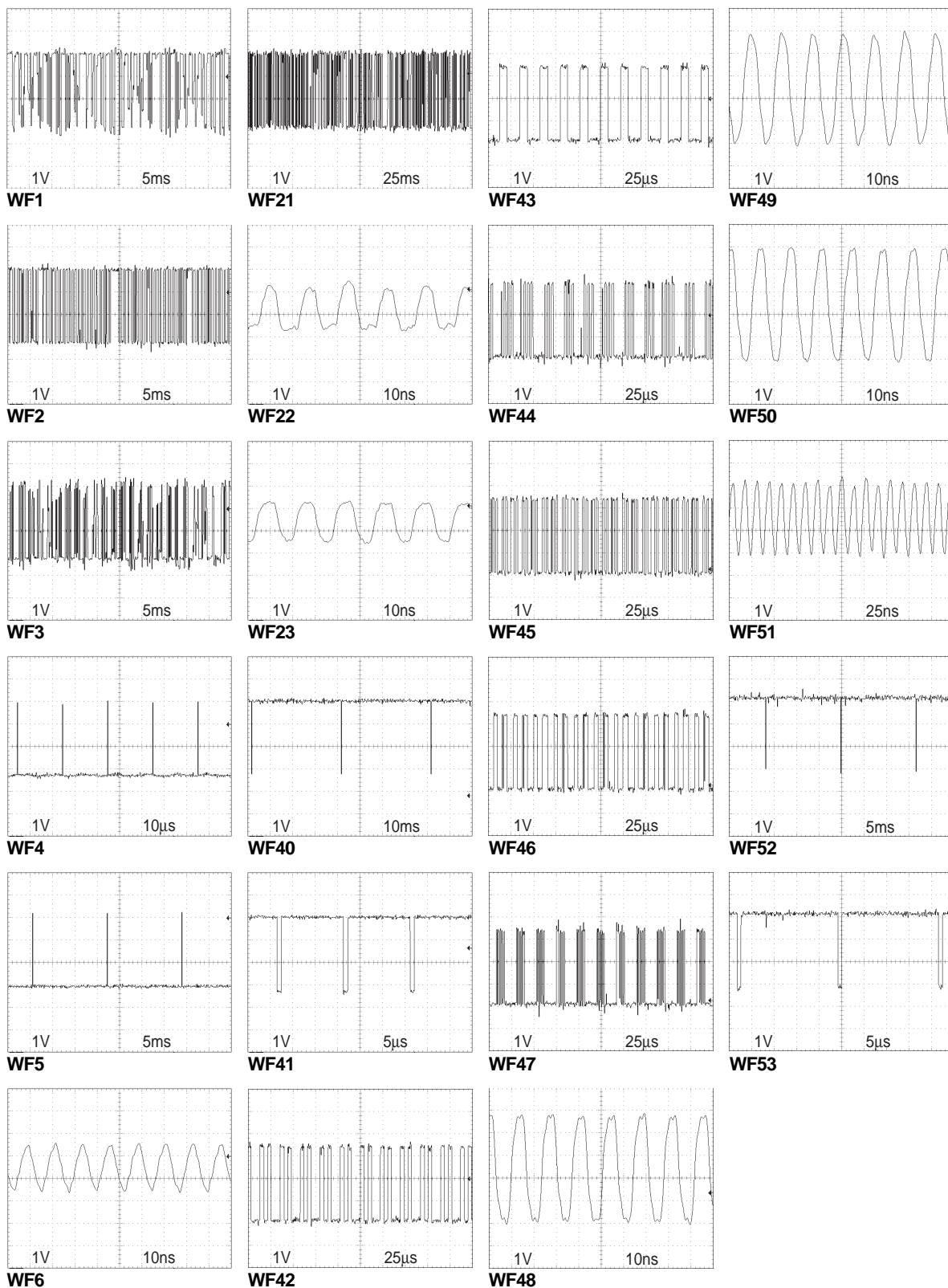
### Check Point of IC8001

Pin	Name	Voltage	Check Point	WF No.	Remarks	Pin	Name	Voltage	Check Point	WF No.	Remarks	
B16	VOP0	0.7	L2631 (LEFT)	WF1	FOIL SIDE	A7	V11P26	1.0	R5639 (LOWER) 	WF21	FOIL SIDE	
C16	VOP1	0.5	L2630 (LEFT)		FOIL SIDE	B7	V11P4	0.4				
C20	VOP2	0.8	L2629 (LEFT)		FOIL SIDE	C7	V11P5	0.4				
A21	VOP3	0.7	L2628 (LEFT)		FOIL SIDE	A6	V11P6	0.4				
B21	VOP4	0.9	L2627 (LEFT)		FOIL SIDE	B6	V11P7	0.4				
F19	VOP5	1.1	L2626 (RIGHT)		COMPONENT SIDE	C6	V11P27	0.5				
C21	VOP6	0.9	L2625 (LEFT)		FOIL SIDE	A5	V11P8	2.0	R5640 (LOWER) 		FOIL SIDE	
A22	VOP7	1.1	L2624 (LEFT)		FOIL SIDE	B5	V11P9	0				
D20	VOP8	0.9	L2623 (RIGHT)		COMPONENT SIDE	B10	V11P2	0.5				
B22	VOP9	1.1	L2622 (LEFT)		FOIL SIDE	C10	V11P3	0.4	R5635 (LOWER) 		FOIL SIDE	
A16	VOP10	0.6	L2621 (LEFT)	FOIL SIDE	A9	V11P22	0					
F16	VOP11	0.6	L2620 (RIGHT)	COMPONENT SIDE	B9	V11P23	0					
C18	VOP12	0.6	L2619 (LEFT)	FOIL SIDE	B8	V11P24	0	R5637 (LOWER)	FOIL SIDE			
A19	VOP13	0.6	L2618 (LEFT)	FOIL SIDE	C8	V11P25	0.8	R5638 (LOWER)	FOIL SIDE			
B19	VOP14	0.9	L2617 (LEFT)	FOIL SIDE	A8	V11CKOUT	0	L5009 (LOWER)	WF22		FOIL SIDE	
F18	VOP15	0.9	L2616 (RIGHT)	COMPONENT SIDE	C9	V11CLK	1.7	R5636 (LOWER)	WF23	FOIL SIDE		
C19	VOP16	0.8	L2615 (LEFT)	FOIL SIDE	D2	V11VSYNC	0	R5645 (LOWER)	WF40	FOIL SIDE		
A20	VOP17	0.8	L2614 (LEFT)	FOIL SIDE	D1	V11HSYNC	0	R5646 (LOWER)	WF41	FOIL SIDE		
E19	VOP18	1.0	L2613 (RIGHT)	COMPONENT SIDE	D7							
B20	VOP19	1.2	L2612 (LEFT)	FOIL SIDE	D8							
E16	VOP20	0.7	L2611 (RIGHT)	WF3	COMPONENT SIDE	D16	VDD33	3.3	L8001 (UPPER)	—	COMPONENT SIDE	
C15	VOP21	0.5	L2610 (LEFT)		FOIL SIDE	⋮						
E17	VOP22	0.7	L2609 (RIGHT)		COMPONENT SIDE	etc.						
A17	VOP23	0.7	L2608 (LEFT)		FOIL SIDE	N10						
B17	VOP24	0.8	L2607 (LEFT)		FOIL SIDE	P10						
C17	VOP25	0.9	L2606 (LEFT)		FOIL SIDE	R10	VDD12	1.2	L8002 (RIGHT)	—	COMPONENT SIDE	
A18	VOP26	0.5	L2605 (LEFT)		FOIL SIDE	⋮						
F17	VOP27	0.9	L2604 (RIGHT)		COMPONENT SIDE	etc.						
B18	VOP28	1.1	L2603 (LEFT)		FOIL SIDE	K23						
E18	VOP29	1.1	L2602 (RIGHT)		COMPONENT SIDE	K26						
A23	MVCLK	1.4	L2601 (LOWER)	WF6	FOIL SIDE	M21	VDDIO	1.8	L8003 (UPPER)	—	COMPONENT SIDE	
C22	MHSYNC	3.3	R2625 (LEFT)	WF4	FOIL SIDE	⋮						
E20	MVSYNC	3.4	R2624 (LEFT)	WF5	FOIL SIDE	etc.						
AF13	SDCLK	0	R8208 (RIGHT)	—	FOIL SIDE	N17						
AB12	SDDAT0	3.3	R8201 (RIGHT)	—	FOIL SIDE	R17	VDDR					
AE13	SDDAT1	3.3	R8202 (RIGHT)	—	FOIL SIDE	T15	VDDA	3.3	L8004 (UPPER)	—	COMPONENT SIDE	
AB13	SDDAT2	3.3	R8203 (RIGHT)	—	FOIL SIDE	⋮						
AA13	SDDAT3	3.3	R8204 (RIGHT)	—	FOIL SIDE	etc.						
C5	VI1P28	1.5	R5642 (LOWER) 	WF21	FOIL SIDE	C12	DACVDD1	3.3	L8006 (LEFT)	—	COMPONENT SIDE	
A4	VI1P29	1.5										
B4	VI1P12	1.7										
C4	VI1P13	1.0	R5649 (LEFT) 		FOIL SIDE	P16	DPAVDD	3.3	L8009 (LOWER)	—	COMPONENT SIDE	
A3	VI1P14	1.2										
B3	VI1P15	1.1										
A2	VI1P16	1.7										
B1	VI1P17	1.4										
C2	VI1P18	1.9	R5650 (LEFT)			FOIL SIDE	H21	MVA VDD				
C1	VI1P19	1.2	R5651 (LEFT)			FOIL SIDE	P3	AGA VDD				

## Check Point of IC2501

Pin	Name	Voltage	Check Point	WF No.	Remarks	Pin	Name	Voltage	Check Point	WF No.	Remarks
C11	RIN0	0.7	R2618 (RIGHT)	WF42	FOIL SIDE	W8	G1OUT3	0.9	L2659 (LEFT)	WF46	FOIL SIDE
A10	RIN1	0.5	R2617 (RIGHT)		FOIL SIDE	Y8	G1OUT2	0.9	L2660 (LEFT)		FOIL SIDE
B10	RIN2	0.7	R2612 (RIGHT) 		FOIL SIDE	V9	G1OUT1	0.8	L2661 (RIGHT)		COMPONENT SIDE
C10	RIN3	0.7				W9	G1OUT0	1.0	L2662 (UPPER)		COMPONENT SIDE
A9	RIN4	0.8				Y9	G2OUT9	1.6	L2663 (LEFT)		FOIL SIDE
B9	RIN5	0.9	R2611 (RIGHT) 		FOIL SIDE	V10	G2OUT8	1.3	L2664 (LEFT)		FOIL SIDE
C9	RIN6	0.5				W10	G2OUT7	0.6	L2665 (LEFT)		FOIL SIDE
A8	RIN7	0.9				Y10	G2OUT6	0.9	L2666 (LEFT)		FOIL SIDE
B8	RIN8	1.1				V11	G2OUT5	0.6	L2667 (RIGHT)		COMPONENT SIDE
C8	RIN9	1.1	R2621 (RIGHT) 	WF43	W11	G2OUT4	0.9	L2668 (RIGHT)	COMPONENT SIDE		
A14	GIN0	0.6			Y11	G2OUT3	0.9	L2669 (LEFT)	FOIL SIDE		
B14	GIN1	0.6			V12	G2OUT2	0.9	L2670 (LEFT)	FOIL SIDE		
A13	GIN2	0.6			W12	G2OUT1	0.8	L2671 (LEFT)	FOIL SIDE		
B13	GIN3	0.6			Y12	G2OUT0	1.0	L2672 (LEFT)	FOIL SIDE		
C13	GIN4	0.9			V19	B1OUT9	1.4	L2674 (LEFT)	FOIL SIDE		
A12	GIN5	0.9			V20	B1OUT8	1.2	L2675 (LOWER)	FOIL SIDE		
B12	GIN6	0.8			U18	B1OUT7	0.6	L2676 (LEFT)	FOIL SIDE		
C12	GIN7	0.8			R2614 (RIGHT) 	FOIL SIDE	U19	B1OUT6	0.5	L2677 (LEFT)	FOIL SIDE
A11	GIN8	1.0	U20	B1OUT5			1.2	L2678 (LOWER)	FOIL SIDE		
B11	GIN9	1.2	T18	B1OUT4			0.5	L2679 (LOWER)	FOIL SIDE		
A18	BIN0	0.7	R2623 (RIGHT)	WF44	FOIL SIDE	T19	B1OUT3	0.9	L2680 (LOWER)	FOIL SIDE	
A17	BIN1	0.5	R2622 (RIGHT)		FOIL SIDE	T20	B1OUT2	1.0	L2681 (LOWER)	FOIL SIDE	
B17	BIN2	0.8	R2615 (RIGHT) 		FOIL SIDE	R18	B1OUT1	0.9	L2682 (LOWER)	FOIL SIDE	
C17	BIN3	0.7				R19	B1OUT0	0.9	L2683 (LOWER)	FOIL SIDE	
A16	BIN4	0.9				R20	B2OUT9	1.4	L2684 (LOWER)	FOIL SIDE	
B16	BIN5	1.1	R2616 (RIGHT) 		FOIL SIDE	P19	B2OUT8	1.2	L2685 (LOWER)	FOIL SIDE	
C16	BIN6	0.9				P20	B2OUT7	0.6	L2686 (LOWER)	FOIL SIDE	
A15	BIN7	1.1				N18	B2OUT6	0.5	L2687 (LOWER)	FOIL SIDE	
B15	BIN8	0.9				N19	B2OUT5	1.3	L2688 (LOWER)	FOIL SIDE	
C15	BIN9	1.1				N20	B2OUT4	0.5	L2689 (LOWER)	FOIL SIDE	
J3	R1OUT9	1.5	L2632 (UPPER)	WF45	FOIL SIDE	M18	B2OUT3	0.9	L2690 (LOWER)	FOIL SIDE	
J2	R1OUT8	1.2	L2633 (UPPER)		FOIL SIDE	M19	B2OUT2	1.0	L2691 (LOWER)	FOIL SIDE	
J1	R1OUT7	1.4	L2634 (UPPER)		FOIL SIDE	M20	B2OUT1	0.9	L2692 (LOWER)	FOIL SIDE	
K3	R1OUT6	1.3	L2635 (UPPER)		FOIL SIDE	L18	B2OUT0	0.9	L2693 (LOWER)	FOIL SIDE	
K2	R1OUT5	1.2	L2636 (UPPER)		FOIL SIDE	A19	SCLK	3.2	R2577 (RIGHT)	FOIL SIDE	
K1	R1OUT4	1.2	L2637 (UPPER)		FOIL SIDE	B20	SDATA	3.1	R2578 (LOWER)	FOIL SIDE	
L3	R1OUT3	1.2	L2638 (UPPER)		FOIL SIDE	R1	SHCLK_R	1.5	L2652 (UPPER)	WF48	FOIL SIDE
L2	R1OUT2	1.1	L2639 (UPPER)		FOIL SIDE	V13	SHCLK_G	1.5	L2673 (RIGHT)	WF49	COMPONENT SIDE
L1	R1OUT1	0.9	L2640 (UPPER)		FOIL SIDE	L19	SHCLK_B	1.5	L2694 (RIGHT)	WF50	FOIL SIDE
M3	R1OUT0	0.9	L2641 (UPPER)		FOIL SIDE	E1	DCLK	1.4	TP2505	WF51	FOIL SIDE
M2	R2OUT9	1.5	L2642 (UPPER)		FOIL SIDE	A2	VSYNC	3.4	TP2502	WF52	FOIL SIDE
M1	R2OUT8	1.3	L2643 (UPPER)		FOIL SIDE	A1	HSYNC	3.3	TP2506	WF53	FOIL SIDE
N3	R2OUT7	1.4	L2644 (RIGHT)		FOIL SIDE	D7	VDD1	1.3	L2516 (LEFT)	—	COMPONENT SIDE
N2	R2OUT6	1.3	L2645 (UPPER)		FOIL SIDE	D8					
N1	R2OUT5	1.2	L2646 (UPPER)		FOIL SIDE	⋮					
P3	R2OUT4	1.2	L2647 (UPPER)		FOIL SIDE	etc.					
P2	R2OUT3	1.2	L2648 (RIGHT)		FOIL SIDE	C5	VDD2	3.4	L2510 (UPPER)	—	COMPONENT SIDE
P1	R2OUT2	1.1	L2649 (UPPER)		FOIL SIDE	C14					
R3	R2OUT1	0.9	L2650 (UPPER)	FOIL SIDE	D19						
R2	R2OUT0	0.9	L2651 (UPPER)	FOIL SIDE	⋮						
V6	G1OUT9	1.6	L2653 (LEFT)	FOIL SIDE	etc.						
W6	G1OUT8	1.3	L2654 (LEFT)	FOIL SIDE							
Y6	G1OUT7	0.6	L2655 (LEFT)	FOIL SIDE							
W7	G1OUT6	0.9	L2656 (LEFT)	FOIL SIDE							
Y7	G1OUT5	0.9	L2657 (LEFT)	FOIL SIDE							
V8	G1OUT4	0.6	L2658 (LEFT)	FOIL SIDE							

## 11.2. WAVEFORM TABLE

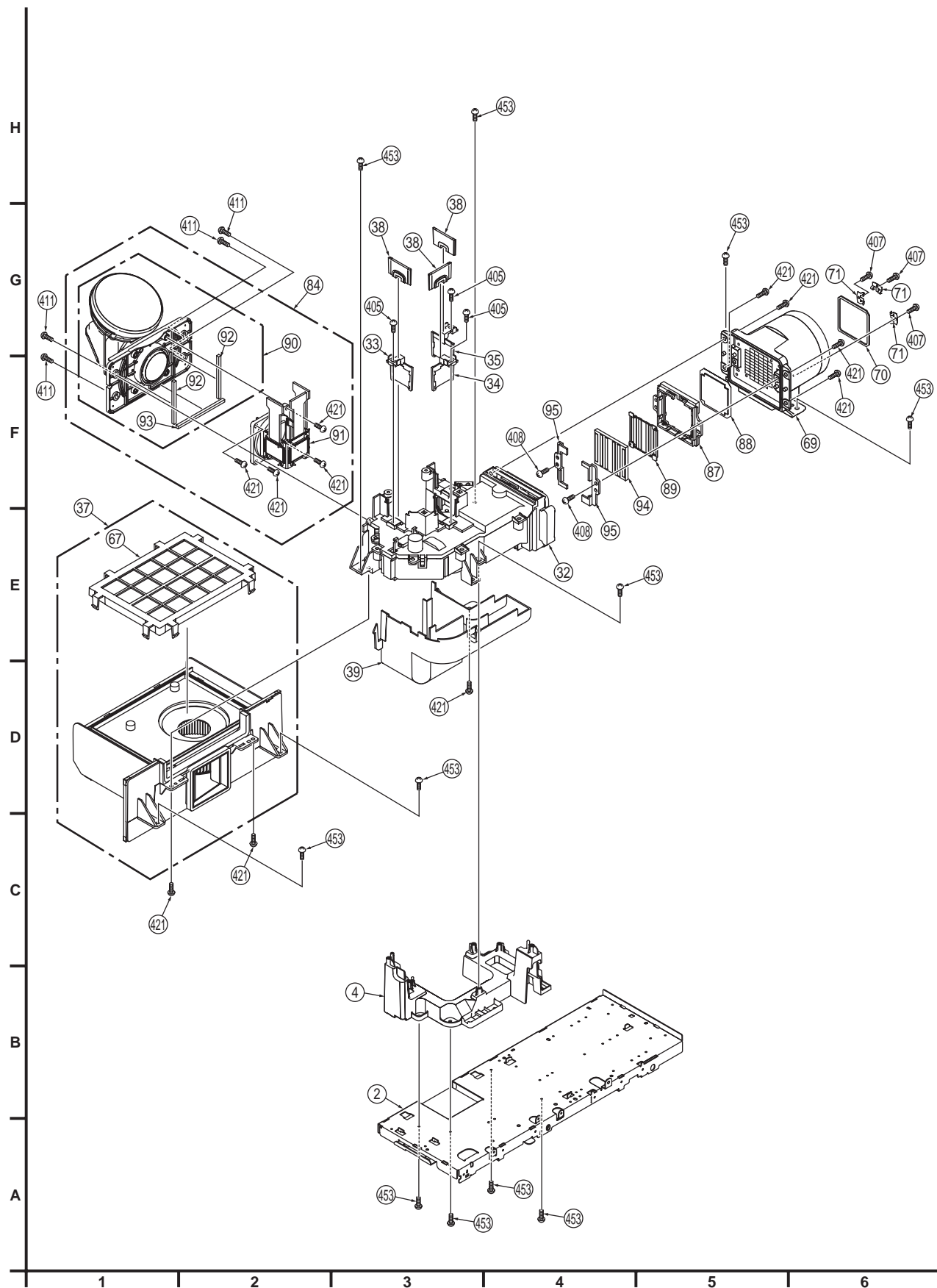




# 12 Exploded Views

## 12.1. OPTICAL UNIT SECTION

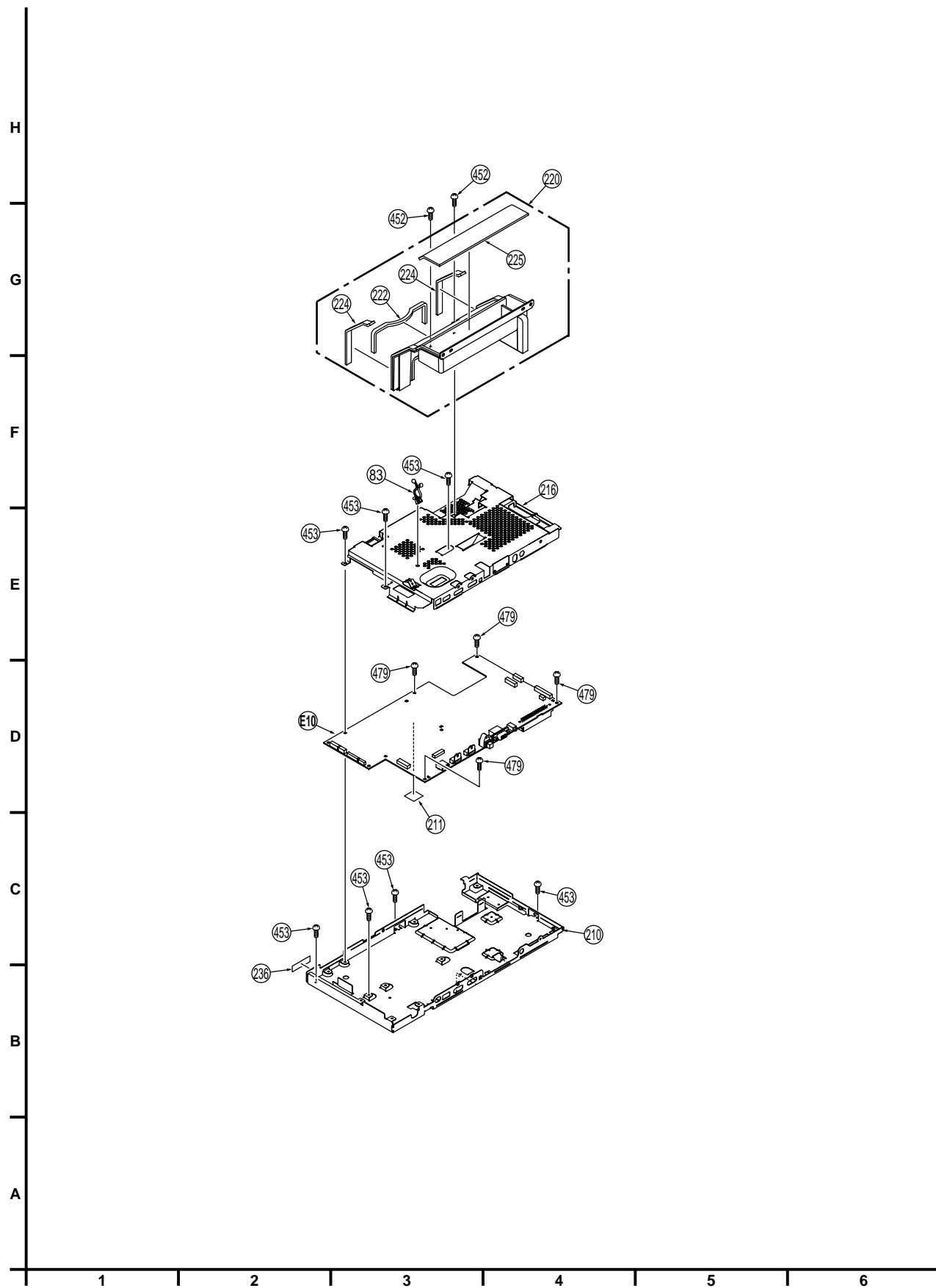
### ① OPTICAL UNIT SECTION





## 12.2. MAIN P.C.B. UNIT AND TOP DUCT UNIT SECTION

### ② MAIN P.C.B. UNIT & TOP DUCT UNIT SECTION




# 13 Replacement Parts List

**BEFORE REPLACING PARTS, READ THE FOLLOWING:**

ADJUSTMENT" in Adjustment Procedures 2 section.

## 13.1. REPLACEMENT NOTES

### 13.1.1. General Notes

1. Use only original replacement parts:  
To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list.
2. **IMPORTANT SAFETY NOTICE**  
Components identified by the sign  have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. **SPECIAL NOTE**  
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
  - a. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
  - b. Parts without mark in the Remarks column are supplied from PASC-NPC.
7. Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

### 13.1.2. Mechanical Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. Abbreviation  
RTL: Retention Time Limited  
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
3. After replacing the LCD/Prism Unit (Ref. No. 91), be sure to perform the following adjustment in order.
  - a. Polarizer Adjustment
  - b. VCOM Adjustment
  - c. White Balance Adjustment
 For above adjustments, refer to "Adjustment Procedures 2."
4. After replacing the Polarizer Red Unit (Ref. No. 33), the Polarizer Green Unit (Ref. No. 34), or the Polarizer Blue Unit (Ref. No. 35), be sure to perform the "POLARIZER

### 13.1.3. Electrical Replacement Notes

1. Unless otherwise specified;  
All resistors are in  $\Omega$ , K = 1,000  $\Omega$ , M = 1,000 k $\Omega$ .
2. Abbreviation
 

RTL:	Retention Time Limited
	This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
NR:	Non Repairable Board Ass'y
MGF CHIP:	Metal Glaze Film Chip
C CHIP:	Ceramic Chip
COMPLX CMP:	Complex Component
W FLMPRF:	Wirewound Flameproof
C.B.A.:	Circuit Board Assembly
P.C.B.:	Printed Circuit Board
E.S.D.:	Electrostatically Sensitive Devices
3. When replacing 0  $\Omega$  resistor, a wire can be substituted for it.
4. Parts with mark "CSP" in the Remarks column are CSP (Chip Size Package) IC.

### COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PT-56LCX70	A
PT-61LCX70	B
PT-50LCX7	C
PT-56LCX7	D
PT-61LCX7	E
PT-50LCX7K	F
PT-56LCX70-K	G
PT-61LCX70-K	H

## 13.2. MECHANICAL REPLACEMENT PARTS LIST

### COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PT-56LCX70	A
PT-61LCX70	B
PT-50LCX7	C
PT-56LCX7	D
PT-61LCX7	E
PT-50LCX7K	F
PT-56LCX70-K	G
PT-61LCX70-K	H

#### Definition of Parts supplier:

1. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
2. Parts without mark in the Remarks column are supplied from PASC-NPC.

#### MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
2	LSMA0990	ENGINE BASE SHIELD	1
4	LSMP0567	ENGINE SUPPORT PIECE	1
32	LSXA0859	OPTICAL SEPARATION UNIT	1 PSEC
33	LSXA0862	POLARIZER RED UNIT	1 PSEC
34	LSXA0863	POLARIZER GREEN UNIT	1 PSEC
35	LSXA0864	POLARIZER BLUE UNIT	1 PSEC
37	LSXA0866	FAN CASE UNIT	1 PSEC
38	LSXA0867	JOINT PIECE UNIT	1 PSEC
39	LSMP0555	COOLING DUCT	1 PSEC
67	LSXA0865	FAN FRAME UNIT	1 PSEC
69	LSQV0119	INTEGRATOR HOLDER UNIT	1 PSEC
70	LSDL0435	INTEGRATOR 1	1 PSEC
71	LSMA0994	INTEGRATOR 1 SPRING	1 PSEC
83	TMM5439	CLAMPER	2 PSEC
84	LSXA0856	OPTICAL BLOCK UNIT ( A,C,D,F,G )	1 PSEC
84	LSXA0894	OPTICAL BLOCK UNIT ( B,E,H )	1 PSEC
87	LSMP0557	PS HOLDER	1 PSEC
88	LSDL0437	INTEGRATOR 2	1 PSEC
89	LSMA0993	AL MASK	1 PSEC
90	LSXA0847	PROJECTION LENS ( A,C,D,F,G )	1 PSEC
90	LSXA0897	PROJECTION LENS ( B,E,H )	1 PSEC
91	LSXA0848	LCD/PRISM UNIT	1 PSEC
92	LSMF0554	PROJECTION LENS SPONGE 1	1 PSEC
93	LSMF0555	PROJECTION LENS SPONGE 2	1 PSEC
94	LSDL0434	P/S CONVERTER	1 PSEC
95	LSMA1013	PS SPRING	1 PSEC
210	LSSC0972	MAIN P.C.B. SHILD CASE BOTTOM	2
211	LSMG0185	SHEET	2
216	LSSC0971	MAIN P.C.B. SHILD CASE TOP	2
220	LSXA0876	TOP DUCT UNIT	2 PSEC
222	LSMF0558	TOP DUCT SPONGE 1	2 PSEC
224	LSMF0559	TOP DUCT SPONGE 2	2 PSEC
225	LSMF0557	TOP FILTER	2 PSEC
236	LSMF0367	SHEET,NYLON-RAYON	2
405	XTN26+6GFJ	SCREW,STEEL	1 PSEC
407	XYN2+J4FJK	SCREW,STEEL	1 PSEC
408	XYN3+J8FJK	SCREW,STEEL	1 PSEC
411	XYC3+FG10FJ	SCREW	1 PSEC
421	XTV3+8GFJ	TAPPING SCREW,STEEL	1
452	XTV3+8FFJ	TAPPING SCREW,STEEL	2

Ref. No.	Part No.	Part Name & Description	Remarks
453	XTV3+10JFJ	TAPPING SCREW,STEEL	1,2
479	XYE3+FJ8FJ	SCREW W/WASHER,STEEL	2
E10	LSEP3227A	MAIN P.C.B.	2 RTL

## 13.3. SERVICE FIXTURES AND TOOLS REPLACEMENT PARTS LIST

#### Definition of Parts supplier:

1. All parts are supplied from PSEC.

#### SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	LSEP3112A	Relay PCB (LCD Panel)	PSEC
	LSUA0042	LCD Panel Flat Extension Cable	PSEC
	LSUA0039	Fan Extension Cable	PSEC
	LSUA0063	7 Pin Extension Cable	PSEC
	LSUA0065	Thermal Fuse Defeat Cable	PSEC
	LSUA0043	RS232C I/F Tool	PSEC
	LSUA0064	7 Pin Extension Cable	PSEC
	LSUA0068	8 Pin Extension Cable	PSEC
	LSUA0069	Relay PCB (Adjustment)	PSEC

## 13.4. ELECTRICAL REPLACEMENT PARTS LIST

#### Definition of Parts supplier:

1. All parts are supplied from PASE-NPC.

#### PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP3227A	MAIN P.C.B.	E.S.D. RTL

### 13.4.1. MAIN P.C.B.

#### INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1101	C0BBBA000022	IC, LINEAR	
IC1102	C0BBBA000022	IC, LINEAR	
IC1103	C0DBAYY00219	IC, LINEAR	
IC1104	C0DBAYY00219	IC, LINEAR	
IC1105	C0DBEYY00022	IC, LINEAR	
IC1106	C0CBCDD00004	IC, LINEAR	
IC1107	C0DBEYY00022	IC, LINEAR	
IC1108	C0CBCBC00130	IC, LINEAR	
IC2001	C1AB00002607	IC, LINEAR	
IC2002	C1AB00002607	IC, LINEAR	
IC2003	C1AB00002607	IC, LINEAR	
IC2004	C1AB00002766	IC, LINEAR	
IC2005	C1AB00002766	IC, LINEAR	
IC2006	C1AB00002766	IC, LINEAR	
IC2007	C0DBEKG00004	IC, LINEAR	
IC2501	C1AB00002351	IC, LINEAR	
IC2504	C0JBAB000899	IC, LOGIC	E.S.D.
or IC2504	C0JBAB000771	IC, LOGIC	E.S.D.
IC3001	AN15876A-VT	ICS FOR VIDEO / AUDIO	
IC3002	C0JBAB000832	IC, LOGIC	E.S.D.
IC4001	C1AB00002747	IC, LINEAR	
IC4002	C0CBCBD00048	IC, LINEAR	
IC4003	C0ABBB000230	IC, LINEAR	
IC4004	C0DBFFD00003	IC, LINEAR	
IC4501	C1AB00002730	IC, LINEAR	
IC5500	LSSK0113	IC, EEP ROM	E.S.D.

Ref. No.	Part No.	Part Name & Description	Remarks
IC5501	LSSK0112	IC, EEP ROM	E.S.D.
IC5503	CIAB00002641	IC, LINEAR	
IC5504	LSSK0111	IC, EEP ROM	E.S.D.
IC5506	C0DBGGF00001	IC, LINEAR	
IC5508	C0CBCAD00015	IC, LINEAR	
IC5509	C0CBCAD00082	IC, LINEAR	
IC5510	CIAB00002753	IC, LINEAR	
IC5511	C0JBAS000258	IC, LOGIC	E.S.D.
IC5512	C0JBAS000258	IC, LOGIC	E.S.D.
IC6002	C0EBY0000341	IC, LINEAR	
IC6003	C0EBY0000341	IC, LINEAR	
IC6004	LSSK0117	IC, 32BIT MICROCONTROLLER	E.S.D.
IC6005	C3EBJC000061	IC, EEP ROM	E.S.D.
IC8001	MN2WS0039A	ICS FOR VIDEO / AUDIO	CSP
IC8004	COZBZ0001030	IC, LINEAR	
IC8005	COEBM0000055	IC, LINEAR	
IC8201	LSSK0115	IC, EEP ROM	E.S.D.
IC8202	C3ABSG000039	IC, D RAM	E.S.D. CSP
IC8203	C3ABSG000039	IC, D RAM	E.S.D. CSP
IC8404	LSSK0116	IC, EEP ROM	E.S.D.
IC8802	MN88435	ICS FOR VIDEO / AUDIO	

## TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1102	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1102	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q1102	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q1106	BlCHPD000003	TRANSISTOR FET	
Q1107	BlCHPD000003	TRANSISTOR FET	
Q3004	BlMBACA00006	TRANSISTOR SI NPN CHIP	
Q4001	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4001	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4001	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4002	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4002	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4501	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4501	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4502	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4502	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q4502	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q4503	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4503	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4503	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4504	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4504	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4504	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4505	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4505	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q4505	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4506	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4506	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q4506	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q4507	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4507	BlABCF000020	TRANSISTOR SI NPN CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
or Q4507	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q4508	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4508	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q4508	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q5500	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5500	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5500	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5501	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5501	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5502	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5502	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5502	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5503	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5503	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5503	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5504	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5504	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5504	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5505	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5505	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5505	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5508	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5508	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5508	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q5514	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5515	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5516	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5517	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5518	BlDHDC000028	TRANSISTOR SI FET CHIP	
Q5519	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5519	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q5519	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q6003	2SA207700L	TRANSISTOR SI PNP CHIP	
Q6005	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q6005	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q6005	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q6008	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6008	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q6008	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q6009	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6009	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q6009	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q6010	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6010	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q6010	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q6017	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6017	BlABCF000020	TRANSISTOR SI NPN CHIP	
or Q6017	BlABCF000112	TRANSISTOR SI NPN CHIP	
Q6018	2SD1819A0L	TRANSISTOR SI NPN CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
or Q6018	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6018	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q8803	B1MBACA00006	TRANSISTOR SI NPN CHIP	
Q8804	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q8804	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q8804	B1ADCF000075	TRANSISTOR SI PNP CHIP	

## DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1101	MA2J111008	DIODE SI CHIP	
or D1101	B0ACCK000005	DIODE SI CHIP	
or D1101	MA2J11100L	DIODE SI CHIP	
D1102	MA2J72900L	DIODE SI CHIP	
D1103	MAZ80680ML	DIODE ZENER CHIP 6.8V	
D1104	MA2J111008	DIODE SI CHIP	
or D1104	B0ACCK000005	DIODE SI CHIP	
or D1104	MA2J11100L	DIODE SI CHIP	
D1105	MA2J111008	DIODE SI CHIP	
or D1105	B0ACCK000005	DIODE SI CHIP	
or D1105	MA2J11100L	DIODE SI CHIP	
D1106	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1107	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1108	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1110	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1111	MA2J111008	DIODE SI CHIP	
or D1111	B0ACCK000005	DIODE SI CHIP	
or D1111	MA2J11100L	DIODE SI CHIP	
D1112	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1113	MA2J111008	DIODE SI CHIP	
or D1113	B0ACCK000005	DIODE SI CHIP	
or D1113	MA2J11100L	DIODE SI CHIP	
D1114	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1117	MA24D5400B	SCHOTTKY BARRIER DIODES	
D3007	MAZ80620ML	DIODE ZENER CHIP 6.2V	
D3008	MAZ80620ML	DIODE ZENER CHIP 6.2V	
D4001	B3RAE0000030	IC, LINEAR	
D4501	MAZ81300ML	DIODE ZENER CHIP 13V	
D4503	MA3X152D0L	DIODE SI CHIP	
D4504	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D4505	MA3X152E0L	DIODE SI CHIP	
or D4505	B0ADCF000007	DIODE SI CHIP	
D5500	EZAEG2A50AX	OTHER FILTERS	
D5501	EZAEG2A50AX	OTHER FILTERS	
D5502	EZAEG2A50AX	OTHER FILTERS	
D5503	EZAEG2A50AX	OTHER FILTERS	
D5504	EZAEG2A50AX	OTHER FILTERS	
D5505	EZAEG2A50AX	OTHER FILTERS	
D5506	EZAEG2A50AX	OTHER FILTERS	
D5507	EZAEG2A50AX	OTHER FILTERS	
D5508	EZAEG2A50AX	OTHER FILTERS	
D5509	EZAEG2A50AX	OTHER FILTERS	
D5510	EZAEG2A50AX	OTHER FILTERS	
D5511	EZAEG2A50AX	OTHER FILTERS	
D5512	EZAEG2A50AX	OTHER FILTERS	
D5513	MAZ80560ML	DIODE ZENER CHIP 5.6V	
D5514	EZAEG2A50AX	OTHER FILTERS	
D5515	MAZ80560ML	DIODE ZENER CHIP 5.6V	
D5516	EZAEG2A50AX	OTHER FILTERS	
D5517	EZAEG2A50AX	OTHER FILTERS	
D5518	EZAEG2A50AX	OTHER FILTERS	

Ref. No.	Part No.	Part Name & Description	Remarks
D5519	EZAEG2A50AX	OTHER FILTERS	
D5520	EZAEG2A50AX	OTHER FILTERS	
D5521	EZAEG2A50AX	OTHER FILTERS	
D5522	EZAEG2A50AX	OTHER FILTERS	
D5523	EZAEG2A50AX	OTHER FILTERS	
D5524	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5525	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5526	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5527	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5528	EZAEG2A50AX	OTHER FILTERS	
D6002	MA2J111008	DIODE SI CHIP	
or D6002	B0ACCK000005	DIODE SI CHIP	
or D6002	MA2J11100L	DIODE SI CHIP	
D6003	MA2J111008	DIODE SI CHIP	
or D6003	B0ACCK000005	DIODE SI CHIP	
or D6003	MA2J11100L	DIODE SI CHIP	
D6004	MA2J111008	DIODE SI CHIP	
or D6004	B0ACCK000005	DIODE SI CHIP	
or D6004	MA2J11100L	DIODE SI CHIP	
D6005	B0JCCE000008	DIODE SI CHIP	
D6019	B0JCCE000008	DIODE SI CHIP	
D8801	LNJ208R8ARA	LIGHT EMITTING DIODE	
D8802	LNJ208R8ARA	LIGHT EMITTING DIODE	

## RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1105	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1107	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1108	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1111	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1112	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1113	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1114	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R1115	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	
R1116	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R1117	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1118	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1119	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1120	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1121	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1122	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1123	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1125	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R1128	D1BDR082A042	MGF CHIP 1/10W 82	
R1129	ERA3YED103V	MGF CHIP 1/16W 10K	
R1130	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1131	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R1132	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1133	ERA3YED182V	MGF CHIP 1/16W 1.8K	
R1134	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1135	D1BDR082A042	MGF CHIP 1/10W 82	
R1136	D1BDR082A042	MGF CHIP 1/10W 82	
R1139	D1BDR082A042	MGF CHIP 1/10W 82	
R1140	ERA3YED751V	MGF CHIP 1/16W 750	
R1141	ERA3YED751V	MGF CHIP 1/16W 750	
R1142	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1143	ERA3YED102V	MGF CHIP 1/16W 1K	
R1144	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1145	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1148	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1149	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1152	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1153	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R1154	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1159	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1160	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1161	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1163	ERA3YED751V	MGF CHIP 1/16W 750	
R1164	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1165	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1166	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1169	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1171	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2002	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2009	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2014	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2021	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2024	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2025	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2028	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2029	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2030	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2031	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2032	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2033	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2034	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2035	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2036	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2037	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2038	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2039	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2040	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2041	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2042	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2043	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2044	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2045	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2052	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2053	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2054	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2055	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2056	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2057	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2058	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2059	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2060	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2061	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2062	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2063	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2064	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2065	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2066	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2067	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2068	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2069	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2070	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2071	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2072	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2073	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2078	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2079	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2080	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2081	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2082	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2083	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2085	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2086	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2089	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2090	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2091	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2092	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2094	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2096	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2097	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2098	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2099	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2101	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2102	ERJ3GEYJ220V	MGF CHIP 1/16W 22	

Ref. No.	Part No.	Part Name & Description	Remarks
R2103	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2104	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2105	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2106	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2108	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2109	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2110	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2111	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2112	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2113	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2114	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2115	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2116	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2117	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2118	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2119	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2122	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2124	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2125	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2126	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2127	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2128	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2130	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2131	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2132	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2133	ERA3YED153V	MGF CHIP 1/16W 15K	
R2136	ERJ12YJR68U	MGF CHIP 1/2W 68	
R2137	ERA3YED122V	MGF CHIP 1/16W 1.2K	
R2138	ERJ3EKF7501V	METAL GLAZE FILM CHIP 1/16W 7.5K +-1%	
R2501	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2502	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2504	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2519	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2525	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2527	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2533	EXB38VR000V	ARRAY CHIP 0	
R2535	EXB38VR000V	ARRAY CHIP 0	
R2537	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2539	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2541	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2543	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2545	EXB38VR000V	ARRAY CHIP 0	
R2546	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2547	EXB38VR000V	ARRAY CHIP 0	
R2548	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2549	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2550	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2551	EXB38VR000V	ARRAY CHIP 0	
R2552	EXB38VR000V	ARRAY CHIP 0	
R2553	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2554	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2555	EXB38VR000V	ARRAY CHIP 0	
R2556	EXB38VR000V	ARRAY CHIP 0	
R2557	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2559	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2560	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2561	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2562	EXB38VR000V	ARRAY CHIP 0	
R2563	EXB38VR000V	ARRAY CHIP 0	
R2564	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2565	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2567	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2568	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2569	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2570	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2571	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2572	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2574	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2575	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2576	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2579	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2580	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R2581	EXB38VR000V	ARRAY CHIP 0	
R2582	EXB38VR000V	ARRAY CHIP 0	
R2611	EXB38VR000V	ARRAY CHIP 0	
R2612	EXB38VR000V	ARRAY CHIP 0	
R2613	EXB38VR000V	ARRAY CHIP 0	
R2614	EXB38VR000V	ARRAY CHIP 0	
R2615	EXB38VR000V	ARRAY CHIP 0	
R2616	EXB38VR000V	ARRAY CHIP 0	
R2617	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2618	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2619	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2621	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2622	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2623	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2624	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2625	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2633	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2638	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2641	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2642	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3004	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3005	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3006	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3008	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3009	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3010	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3012	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3013	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3014	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3015	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3016	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3017	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3018	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3019	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3020	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3021	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3022	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3023	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3024	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3025	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3026	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3027	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3028	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3029	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3035	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3036	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3041	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3042	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3043	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3048	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3049	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3050	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3051	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3052	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3053	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3054	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3055	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R3056	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R3057	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3058	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R3059	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R3060	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3061	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3062	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3063	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3064	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3065	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3066	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3067	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3068	ERJ3GEYJ680V	MGF CHIP 1/16W 68	

Ref. No.	Part No.	Part Name & Description	Remarks
R3069	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3070	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3071	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3072	ERJ3EKF1000V	MGF CHIP 1/16W 100	
R3073	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3074	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3075	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3076	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3077	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3078	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3082	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3085	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3086	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3087	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R4001	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4002	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4003	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4006	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4007	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4008	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4009	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4010	ERJ3EKF2002V	MGF CHIP 1/16W 20K	
R4011	ERJ3EKF2002V	MGF CHIP 1/16W 20K	
R4012	ERJ3EKF2002V	MGF CHIP 1/16W 20K	
R4013	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4018	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R4019	ERJ3GEYJ301V	MGF CHIP 1/16W 300	
R4022	ERJ3EKF2001V	MGF CHIP 1/16W 2K	
R4023	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4024	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4026	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4027	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4028	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4029	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4030	ERJ3EKF1602V	MGF CHIP 1/16W 16K	
R4031	ERJ3EKF1602V	MGF CHIP 1/16W 16K	
R4032	ERJ3EKF2202V	MGF CHIP 1/16W 22K	
R4033	ERJ3EKF2202V	MGF CHIP 1/16W 22K	
R4034	ERJ3EKF3602V	MGF CHIP 1/16W 36K	
R4035	ERJ3EKF3602V	MGF CHIP 1/16W 36K	
R4038	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4039	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4042	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4046	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4047	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4501	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4502	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4503	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4504	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4505	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4506	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4507	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4508	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4509	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4510	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4511	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4512	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4513	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4514	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R4516	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4517	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4518	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4519	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4520	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4521	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4522	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4524	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4525	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4526	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R4527	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4528	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4529	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4530	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	



Ref. No.	Part No.	Part Name & Description	Remarks
R4531	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4532	ERDS2TJ392	CARBON 1/4W 3.9K	
R5004	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5005	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5009	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5010	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5011	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5012	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5013	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5014	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5015	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5016	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5017	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5018	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5020	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5022	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5024	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5025	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5026	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5027	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5028	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5029	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5030	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5033	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5045	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5046	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5047	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R5048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5049	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5051	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5058	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5500	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5501	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5502	ERJ3GEYJ390V	MGF CHIP 1/16W 39	
R5503	ERJ3GEYJ390V	MGF CHIP 1/16W 39	
R5506	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5507	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5508	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5509	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5510	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5511	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5512	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5513	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5514	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5515	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5516	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5517	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5518	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5519	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5520	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5521	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5522	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5523	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5524	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5525	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5526	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5527	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5528	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5529	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5530	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5531	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5532	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5533	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5535	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5536	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5538	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5539	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5540	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5541	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5542	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5543	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5544	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5545	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R5546	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5547	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5548	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5549	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5550	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5551	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5552	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5553	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5554	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5557	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5558	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5559	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5560	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5561	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5562	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5563	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5564	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5565	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5566	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5567	ERJ3EKF4701V	MGF CHIP 1/16W 4.7K	
R5570	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5578	ERJ3GEYJ151V	MGF CHIP 1/16W 150	
R5579	ERJ3GEYJ151V	MGF CHIP 1/16W 150	
R5587	ERJ3EKF8200V	MGF CHIP 1/16W 820	
R5593	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R5596	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5597	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5599	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5602	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5604	ERJ3EKF7501V	MGF CHIP 1/16W 7.5K	
R5606	ERJ3EKF4701V	MGF CHIP 1/16W 4.7K	
R5609	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5611	ERJ3EKF1371V	MGF CHIP 1/16W 1.37K	
R5612	ERJ3EKF1501V	MGF CHIP 1/16W 1.5K	
R5613	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5614	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5615	ERJ3EKF1600V	MGF CHIP 1/16W 160	
R5616	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5617	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5618	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5619	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5620	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5621	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5622	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5623	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5624	ERJ3EKF1691V	MGF CHIP 1/16W 1.69K	
R5625	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5626	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R5627	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5628	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5629	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5631	ERJ3EKF4990V	MGF CHIP 1/16W 499	
R5635	EXB38V121JV	ARRAY CHIP 120	
R5636	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5637	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5638	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5639	EXB38V121JV	ARRAY CHIP 120	
R5640	EXB38V121JV	ARRAY CHIP 120	
R5641	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5642	EXB38V121JV	ARRAY CHIP 120	
R5643	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5644	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5645	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5646	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5647	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5648	EXB38V330JV	ARRAY CHIP 33	
R5649	EXB38V121JV	ARRAY CHIP 120	
R5650	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5651	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5653	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5654	ERJ3GEYJ0R00V	MGF CHIP 1/16W 0	
R5656	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R5657	ERJ3GEYJ470V	MGF CHIP 1/16W 47	

Ref. No.	Part No.	Part Name & Description	Remarks
R5658	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R5661	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5667	ERJ3GEYJ151V	MGF CHIP 1/16W 150	
R5672	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5673	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5674	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5675	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5676	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6006	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6007	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6008	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6011	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6012	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6013	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6014	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6027	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6030	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6033	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R6034	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6036	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6037	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6038	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6039	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6043	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6044	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6045	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6046	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6049	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6050	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6057	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6058	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6064	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6067	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6068	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6070	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6071	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6072	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6073	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6074	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R6075	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6077	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6079	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R6080	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6081	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6082	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6083	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6084	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6085	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6086	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6087	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6088	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6089	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6090	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6091	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6092	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6099	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6100	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6101	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6102	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6106	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6111	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6112	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R6113	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6114	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6118	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6120	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6121	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R6122	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6123	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6129	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6132	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6133	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6134	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6137	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6138	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6139	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6140	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6149	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6150	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6151	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6152	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6153	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6154	ERJ3EKF7151V	MGF CHIP 1/16W 7.15K	
R6155	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6157	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6158	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6159	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6162	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6169	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6170	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R6171	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R6172	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6173	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R6176	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6177	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6178	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6180	ERJ3GEYJ182V	MGF CHIP 1/16W 1.8K	
R6181	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6182	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6183	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6184	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6185	ERJ3GEYJ821V	MGF CHIP 1/16W 820	
R6190	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6192	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6193	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6194	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6195	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6197	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6198	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6199	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6200	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6201	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6202	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6204	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8001	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R8002	ERJ3GEYJ820V	MGF CHIP 1/16W 82	
R8003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8004	ERJ3EKF2402V	MGF CHIP 1/16W 24K	
R8005	ERJ3EKF1002V	MGF CHIP 1/16W 10K	
R8006	ERJ3EKF6801V	MGF CHIP 1/16W 6.8K	
R8030	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8056	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8057	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8058	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8059	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8060	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8061	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8062	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8063	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8064	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8065	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8066	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8067	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8068	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8069	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8070	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8071	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8072	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8073	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8075	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8076	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8077	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8078	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8082	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R8083	ERJ2GEJ301X	MGF CHIP 1/16W 300	

Ref. No.	Part No.	Part Name & Description	Remarks
R8086	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R8087	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8090	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8091	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8093	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8094	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8098	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8099	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8100	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8101	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8102	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8103	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8105	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8106	ERJ3GEYJ202V	MGF CHIP 1/16W 2K	
R8107	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8108	ERJ3GEYJ183V	MGF CHIP 1/16W 18K	
R8116	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8117	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8118	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8121	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8122	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8123	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8124	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8125	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R8126	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8127	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8128	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8129	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8130	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8131	ERJ3EKF91R0V	MGF CHIP 1/16W 91	
R8133	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8135	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8136	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8201	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8202	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8203	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8204	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8205	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8206	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8207	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8208	J0JBC0000080	BEAD INDUCTOR CHIP	
R8209	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8210	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8211	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8213	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8214	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8215	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8216	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8217	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8218	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8219	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8220	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8221	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8222	ECJ1VC1H470J	C CHIP 50V 47PF	
R8225	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8227	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R8229	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8232	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R8233	ERJ3EKF2700V	MGF CHIP 1/16W 270	
R8234	ERJ3EKF2700V	MGF CHIP 1/16W 270	
R8235	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8410	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8412	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8416	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8419	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8426	EXB38V560JV	ARRAY CHIP 56	
R8427	EXB38V560JV	ARRAY CHIP 56	
R8428	EXB38V560JV	ARRAY CHIP 56	
R8429	EXB38V560JV	ARRAY CHIP 56	
R8430	EXB38V560JV	ARRAY CHIP 56	
R8431	EXB38V560JV	ARRAY CHIP 56	
R8432	EXB38V560JV	ARRAY CHIP 56	

Ref. No.	Part No.	Part Name & Description	Remarks
R8433	EXB38V560JV	ARRAY CHIP 56	
R8434	EXB38V560JV	ARRAY CHIP 56	
R8435	EXB38V560JV	ARRAY CHIP 56	
R8436	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8439	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8440	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8443	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8444	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8454	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8455	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8456	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8457	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8458	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8459	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8460	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8461	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8462	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8463	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8464	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8465	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8466	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8467	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8468	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8469	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8473	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8475	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8476	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8477	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8479	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8480	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8481	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8484	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8500	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8501	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8510	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8511	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8518	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8519	EXB38V473JV	ARRAY CHIP 47K	
R8520	EXB38V473JV	ARRAY CHIP 47K	
R8801	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R8802	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8806	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8807	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8808	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8809	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8810	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8811	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8812	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8813	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
R8814	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
R8815	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R8820	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8821	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8822	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8823	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8825	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8828	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8829	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8841	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8843	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8846	ERJ3EKF1202V	MGF CHIP 1/16W 12K	
R8848	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8851	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8852	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8854	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8856	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8857	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8858	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8859	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8860	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8861	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R8862	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8864	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8868	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8869	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8870	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8873	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8874	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8876	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8877	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8878	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8879	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8888	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8889	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8891	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8892	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8894	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8895	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8896	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8900	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8901	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8902	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8918	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8920	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8921	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8922	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8923	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8924	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8928	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8929	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8930	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8931	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8932	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8933	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8938	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8944	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8945	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8958	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8959	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8960	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8961	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
JS4001	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4002	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4502	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4503	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4505	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4506	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5500	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5501	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

## CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1102	F1H1C104A065	C CHIP 16V 0.1UF	
C1103	F1H1C104A065	C CHIP 16V 0.1UF	
C1104	F1H1C104A065	C CHIP 16V 0.1UF	
C1105	F1H1C104A065	C CHIP 16V 0.1UF	
C1107	F1H1A224A025	C CHIP 10V 0.22UF	
C1108	F1H1A474A025	C CHIP 10V 0.47UF	
C1109	F1H1A105A025	C CHIP 10V 1UF	
C1110	F1H1A105A025	C CHIP 10V 1UF	
C1111	F1H1C104A065	C CHIP 16V 0.1UF	
C1113	F1H1A105A025	C CHIP 10V 1UF	
C1120	F1H1C104A065	C CHIP 16V 0.1UF	
C1121	F1H1C104A065	C CHIP 16V 0.1UF	
C1122	F1H1C104A065	C CHIP 16V 0.1UF	
C1123	F1H1H332A219	C CHIP 50V 3300PF	
C1124	F1H1C104A065	C CHIP 16V 0.1UF	
C1126	F1H1C104A065	C CHIP 16V 0.1UF	
C1127	F1H1C104A065	C CHIP 16V 0.1UF	
C1130	F1H1A105A025	C CHIP 10V 1UF	
C1133	FLJ0J2260004	C CHIP 6.3V 22UF	
C1134	FLJ0J2260004	C CHIP 6.3V 22UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1137	F2G1C4710021	ELECTROLYTIC CHIP 16V 470UF	
C1139	F1H1A224A025	C CHIP 10V 0.22UF	
C1140	F2G1C6810004	ELECTROLYTIC CHIP 16V 680UF	
C1141	EEEH80J101P	ELECTROLYTIC 6.3V 100UF	
C1143	FLJ0J2260004	C CHIP 6.3V 22UF	
C1144	FLJ0J2260004	C CHIP 6.3V 22UF	
C1145	EEEH80J101P	ELECTROLYTIC 6.3V 100UF	
C1147	F1L1C2260012	C CHIP 16V 22UF	
C1148	F1H1H332A219	C CHIP 50V 3300PF	
C1149	F1L1C2260012	C CHIP 16V 22UF	
C1150	F1H1A224A025	C CHIP 10V 0.22UF	
C1151	F2G1C4710021	ELECTROLYTIC CHIP 16V 470UF	
C1152	F2G1C6810004	ELECTROLYTIC CHIP 16V 680UF	
C1160	FLJ0J2260004	C CHIP 6.3V 22UF	
C1161	F1H1C104A065	C CHIP 16V 0.1UF	
C1162	F1H1C104A065	C CHIP 16V 0.1UF	
C1171	FLJ0J2260004	C CHIP 6.3V 22UF	
C2001	F1H1E104A030	C CHIP 25V 0.1UF	
C2002	F1H1E104A030	C CHIP 25V 0.1UF	
C2003	F1H1E104A030	C CHIP 25V 0.1UF	
C2004	F1H1E104A030	C CHIP 25V 0.1UF	
C2005	F1H1E104A030	C CHIP 25V 0.1UF	
C2006	F1H1E104A030	C CHIP 25V 0.1UF	
C2007	F1H1A1050002	C CHIP 10V 1UF	
C2008	F1H1E104A030	C CHIP 25V 0.1UF	
C2009	F1H1E104A030	C CHIP 25V 0.1UF	
C2010	F1H1E104A030	C CHIP 25V 0.1UF	
C2011	F1H1E104A030	C CHIP 25V 0.1UF	
C2013	F1H1A1050002	C CHIP 10V 1UF	
C2014	F1H1H102A219	C CHIP 50V 1000PF	
C2015	F1H1E104A030	C CHIP 25V 0.1UF	
C2018	F1H1E104A030	C CHIP 25V 0.1UF	
C2019	F1H1E104A030	C CHIP 25V 0.1UF	
C2020	F1H1E104A030	C CHIP 25V 0.1UF	
C2021	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2022	FLJ1A106A024	C CHIP 10V 10UF	
C2023	F1H1E104A030	C CHIP 25V 0.1UF	
C2024	F1H1E104A030	C CHIP 25V 0.1UF	
C2025	F1H1H102A219	C CHIP 50V 1000PF	
C2026	F1H1E104A030	C CHIP 25V 0.1UF	
C2027	F1H1E104A030	C CHIP 25V 0.1UF	
C2028	F1H1E104A030	C CHIP 25V 0.1UF	
C2029	F1H1E104A030	C CHIP 25V 0.1UF	
C2030	F1H1E104A030	C CHIP 25V 0.1UF	
C2031	F1H1E104A030	C CHIP 25V 0.1UF	
C2032	F1H1E104A030	C CHIP 25V 0.1UF	
C2033	FLJ1A106A024	C CHIP 10V 10UF	
C2034	F1H1E104A030	C CHIP 25V 0.1UF	
C2035	F1H1A1050002	C CHIP 10V 1UF	
C2036	F1H1E104A030	C CHIP 25V 0.1UF	
C2037	F1H1E104A030	C CHIP 25V 0.1UF	
C2038	F1H1E104A030	C CHIP 25V 0.1UF	
C2039	F1H1E104A030	C CHIP 25V 0.1UF	
C2040	F1H1E104A030	C CHIP 25V 0.1UF	
C2041	F1H1E104A030	C CHIP 25V 0.1UF	
C2042	F1H1E104A030	C CHIP 25V 0.1UF	
C2043	F1H1E104A030	C CHIP 25V 0.1UF	
C2044	F1H1E104A030	C CHIP 25V 0.1UF	
C2045	F1H1E104A030	C CHIP 25V 0.1UF	
C2046	F1H1E104A030	C CHIP 25V 0.1UF	
C2047	F1H1E104A030	C CHIP 25V 0.1UF	
C2048	F1H1E104A030	C CHIP 25V 0.1UF	
C2049	F1H1H102A219	C CHIP 50V 1000PF	
C2053	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2054	F1H1E104A030	C CHIP 25V 0.1UF	
C2055	F1H1E104A030	C CHIP 25V 0.1UF	
C2056	F1H1E104A030	C CHIP 25V 0.1UF	
C2057	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2058	F1H1E104A030	C CHIP 25V 0.1UF	
C2059	F1H1E104A030	C CHIP 25V 0.1UF	
C2060	F1H1E104A030	C CHIP 25V 0.1UF	
C2061	F1H1E104A030	C CHIP 25V 0.1UF	
C2062	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2064	F1H1E104A030	C CHIP 25V 0.1UF	
C2065	F1J1A106A024	C CHIP 10V 10UF	
C2066	F1H1E104A030	C CHIP 25V 0.1UF	
C2067	F1H1E104A030	C CHIP 25V 0.1UF	
C2068	F1H1E104A030	C CHIP 25V 0.1UF	
C2071	F1H1E104A030	C CHIP 25V 0.1UF	
C2072	F1H1E104A030	C CHIP 25V 0.1UF	
C2073	F1H1E104A030	C CHIP 25V 0.1UF	
C2074	F1H1E104A030	C CHIP 25V 0.1UF	
C2075	F1H1E104A030	C CHIP 25V 0.1UF	
C2077	F1H1E104A030	C CHIP 25V 0.1UF	
C2078	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2079	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2080	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2081	F1J1A106A024	C CHIP 10V 10UF	
C2083	F1H1E104A030	C CHIP 25V 0.1UF	
C2085	F1H1E104A030	C CHIP 25V 0.1UF	
C2086	F1H1E104A030	C CHIP 25V 0.1UF	
C2087	F1H1E104A030	C CHIP 25V 0.1UF	
C2088	F1H1E104A030	C CHIP 25V 0.1UF	
C2090	F1H1E104A030	C CHIP 25V 0.1UF	
C2092	F1H1E104A030	C CHIP 25V 0.1UF	
C2093	F1H1E104A030	C CHIP 25V 0.1UF	
C2096	F1H1E104A030	C CHIP 25V 0.1UF	
C2097	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2098	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2099	F1J1A106A024	C CHIP 10V 10UF	
C2100	F1J1A106A024	C CHIP 10V 10UF	
C2105	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2106	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2107	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2108	F1H1E104A030	C CHIP 25V 0.1UF	
C2109	F1H1E104A030	C CHIP 25V 0.1UF	
C2110	F2H1V100A004	ELECTROLYTIC CHIP 35V 10PF	
C2111	F2H1V100A004	ELECTROLYTIC CHIP 35V 10PF	
C2501	F1J1A106A024	C CHIP 10V 10UF	
C2502	F1J1A106A024	C CHIP 10V 10UF	
C2503	F1J1A106A024	C CHIP 10V 10UF	
C2525	F1H1E104A030	C CHIP 25V 0.1UF	
C2526	F2G0G4700005	ELECTROLYTIC CHIP 10V 47PF	
C2527	F1H1E104A030	C CHIP 25V 0.1UF	
C2528	F1H1E104A030	C CHIP 25V 0.1UF	
C2529	F1H1E104A030	C CHIP 25V 0.1UF	
C2530	F1H1E104A030	C CHIP 25V 0.1UF	
C2531	F1H1E104A030	C CHIP 25V 0.1UF	
C2532	F1H1E104A030	C CHIP 25V 0.1UF	
C2533	F1H1E104A030	C CHIP 25V 0.1UF	
C2534	F1H1E104A030	C CHIP 25V 0.1UF	
C2535	F1H1E104A030	C CHIP 25V 0.1UF	
C2536	F1H1E104A030	C CHIP 25V 0.1UF	
C2537	F1H1E104A030	C CHIP 25V 0.1UF	
C2538	F1H1E104A030	C CHIP 25V 0.1UF	
C2539	F1H1E104A030	C CHIP 25V 0.1UF	
C2540	F1H1E104A030	C CHIP 25V 0.1UF	
C2541	F1H1E104A030	C CHIP 25V 0.1UF	
C2542	F1H1E104A030	C CHIP 25V 0.1UF	
C2543	F1H1E104A030	C CHIP 25V 0.1UF	
C2544	F1J1A106A024	C CHIP 10V 10UF	
C2545	F1H1E104A030	C CHIP 25V 0.1UF	
C2546	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C2547	F1H1E104A030	C CHIP 25V 0.1UF	
C2548	F1H1E104A030	C CHIP 25V 0.1UF	
C2549	F1H1E104A030	C CHIP 25V 0.1UF	
C2550	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C2570	F1H1E104A030	C CHIP 25V 0.1UF	
C3001	F2G1C1010014	ELECTROLYTIC CHIP 16V 10UF	
C3003	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3004	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3005	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3006	F1H1C104A008	C CHIP 16V 0.1UF	
C3009	F1H1C104A008	C CHIP 16V 0.1UF	
C3012	F1H1A105A025	C CHIP 10V 1UF	
C3013	F1H1A105A025	C CHIP 10V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3017	F1H1C104A008	C CHIP 16V 0.1UF	
C3018	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3019	F1H1A105A025	C CHIP 10V 1UF	
C3020	F1H1A105A025	C CHIP 10V 1UF	
C3026	F1H1A105A025	C CHIP 10V 1UF	
C3027	F1H1A105A025	C CHIP 10V 1UF	
C3028	F1H1A105A025	C CHIP 10V 1UF	
C3032	F1H1C104A008	C CHIP 16V 0.1UF	
C3033	F1H1A105A025	C CHIP 10V 1UF	
C3034	F1H1A105A025	C CHIP 10V 1UF	
C3035	F1H1A105A025	C CHIP 10V 1UF	
C3036	F1H1A105A025	C CHIP 10V 1UF	
C3037	F1H1A105A025	C CHIP 10V 1UF	
C3038	F1H1A105A025	C CHIP 10V 1UF	
C3039	F2G1C1000014	ELECTROLYTIC CHIP 16V 10UF	
C3040	F1H1A105A025	C CHIP 10V 1UF	
C3041	F1H1E223A029	C CHIP 25V 0.022UF	
C3043	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C3046	F1H1A105A025	C CHIP 10V 1UF	
C3059	ECJ1VC1H101J	C CHIP 50V 100PF	
C3060	F1H1C104A008	C CHIP 16V 0.1UF	
C4001	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4002	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4003	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4004	ECJ1VC1H101J	C CHIP 50V 100PF	
C4005	ECJ1VC1H101J	C CHIP 50V 100PF	
C4006	F1J1A106A024	C CHIP 10V 10UF	
C4007	F1J1A106A024	C CHIP 10V 10UF	
C4008	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4009	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4010	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4011	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4012	F1H1E104A030	C CHIP 25V 0.1UF	
C4013	F1H1E104A030	C CHIP 25V 0.1UF	
C4014	F1H1E104A030	C CHIP 25V 0.1UF	
C4015	F1H1E104A030	C CHIP 25V 0.1UF	
C4016	F1H1E104A030	C CHIP 25V 0.1UF	
C4017	F1H1E104A030	C CHIP 25V 0.1UF	
C4018	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4019	F1H1E104A030	C CHIP 25V 0.1UF	
C4020	F1H1E104A030	C CHIP 25V 0.1UF	
C4021	F1H1E104A030	C CHIP 25V 0.1UF	
C4022	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4023	F1H1E104A030	C CHIP 25V 0.1UF	
C4025	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4026	F1H1E104A030	C CHIP 25V 0.1UF	
C4028	F1H1H120A230	C CHIP 50V 12PF	
C4029	F1H1H120A230	C CHIP 50V 12PF	
C4030	F1H1E104A030	C CHIP 25V 0.1UF	
C4031	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4033	F1H1E104A030	C CHIP 25V 0.1UF	
C4034	F1H1H102A219	C CHIP 50V 1000PF	
C4036	F1H1E104A030	C CHIP 25V 0.1UF	
C4037	F1H1E104A030	C CHIP 25V 0.1UF	
C4039	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4043	ECJ2FF1C475Z	C CHIP 16V 4.7UF	
C4044	F1J0J2260002	C CHIP 6.3V 22UF	
C4046	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4047	ECJ1VC1H181J	C CHIP 50V 180PF	
C4048	ECJ1VC1H181J	C CHIP 50V 180PF	
C4049	F1H1H330A230	C CHIP 50V 33PF	
C4050	F1H1H330A230	C CHIP 50V 33PF	
C4051	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4058	F1J1A106A024	C CHIP 10V 10UF	
C4059	F1J1A106A024	C CHIP 10V 10UF	
C4060	F1H1E104A030	C CHIP 25V 0.1UF	
C4061	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C4062	F1H1H471A189	C CHIP 50V 470PF	
C4063	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4501	F1H1E104A030	C CHIP 25V 0.1UF	
C4502	F1H1E104A030	C CHIP 25V 0.1UF	
C4503	F1H1E104A030	C CHIP 25V 0.1UF	
C4504	F1H1E104A030	C CHIP 25V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C4505	F1H1E104A030	C CHIP 25V 0.1UF	
C4506	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4507	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4508	FLJ1H105A449	C CHIP 50V 1UF	
C4509	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4510	FLJ1H105A449	C CHIP 50V 1UF	
C4511	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4512	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4513	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4514	FLJ1H105A449	C CHIP 50V 1UF	
C4515	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4516	FLJ1H105A449	C CHIP 50V 1UF	
C4517	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4518	F1H1E104A030	C CHIP 25V 0.1UF	
C4519	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4520	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4521	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4522	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4523	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4524	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4525	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4526	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4527	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4528	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4529	F2G1C2200012	ELECTROLYTIC CHIP 16V 22UF	
C4530	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4531	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4532	F1H1E104A030	C CHIP 25V 0.1UF	
C4538	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4539	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4540	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4541	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5000	F1H1C104A065	C CHIP 16V 0.1UF	
C5001	F1H1C104A065	C CHIP 16V 0.1UF	
C5003	F1H1C104A065	C CHIP 16V 0.1UF	
C5017	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5018	F1H1A105A025	C CHIP 10V 1UF	
C5500	F1H1E104A030	C CHIP 25V 0.1UF	
C5501	F1H1E104A030	C CHIP 25V 0.1UF	
C5502	F1H1E104A030	C CHIP 25V 0.1UF	
C5503	F1H1E104A030	C CHIP 25V 0.1UF	
C5508	F2G0J2200006	ELECTROLYTIC CHIP 6.3V 22UF	
C5509	F2G0J2200006	ELECTROLYTIC CHIP 6.3V 22UF	
C5510	F1H1E104A030	C CHIP 25V 0.1UF	
C5511	F1H1E104A030	C CHIP 25V 0.1UF	
C5513	F1H1C104A065	C CHIP 16V 0.1UF	
C5514	F1H1C104A065	C CHIP 16V 0.1UF	
C5515	F1H1C104A065	C CHIP 16V 0.1UF	
C5517	F1H1C104A065	C CHIP 16V 0.1UF	
C5520	FLJ1A106A024	C CHIP 10V 10UF	
C5521	F1H1C104A065	C CHIP 16V 0.1UF	
C5525	ECJ1VB1C105K	C CHIP 16V 1UF	
C5527	F1H1A105A025	C CHIP 10V 1UF	
C5528	F1H1C104A065	C CHIP 16V 0.1UF	
C5531	F1H1C104A065	C CHIP 16V 0.1UF	
C5533	ECJ1VC1H680J	C CHIP 50V 68PF	
C5538	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5539	FLJ1A106A024	C CHIP 10V 10UF	
C5541	ECJ1VC1H471J	C CHIP 50V 470PF	
C5543	F1H1C104A065	C CHIP 16V 0.1UF	
C5544	F1H1C104A065	C CHIP 16V 0.1UF	
C5545	F1H1C104A065	C CHIP 16V 0.1UF	
C5546	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C5547	F1H1C104A065	C CHIP 16V 0.1UF	
C5548	F1H1C104A065	C CHIP 16V 0.1UF	
C5549	F1H1C104A065	C CHIP 16V 0.1UF	
C5550	F1H1C104A065	C CHIP 16V 0.1UF	
C5552	F1H1C104A065	C CHIP 16V 0.1UF	
C5553	F1H1H102A219	C CHIP 50V 1000PF	
C5555	FLJ1A106A024	C CHIP 10V 10UF	
C5556	FLJ1A106A024	C CHIP 10V 10UF	
C5557	F1H1C104A065	C CHIP 16V 0.1UF	
C5559	F1H1C104A065	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5560	F1H1C104A065	C CHIP 16V 0.1UF	
C5562	ECJ1VB1H822K	C CHIP 50V 8200PF	
C5563	ECJ1VB1C823K	C CHIP 16V 0.082UF	
C5564	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5565	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5566	ECJ1VB1C393K	C CHIP 16V 0.039UF	
C5568	F1H1C104A065	C CHIP 16V 0.1UF	
C5569	ECJ1VB0J684K	C CHIP 6.3V 0.68UF	
C5570	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5572	F1H1C104A065	C CHIP 16V 0.1UF	
C5573	F1H1C104A065	C CHIP 16V 0.1UF	
C5574	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5575	F1H1A105A025	C CHIP 10V 1UF	
C5576	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5577	F1H1C104A065	C CHIP 16V 0.1UF	
C5578	F1H1C104A065	C CHIP 16V 0.1UF	
C5580	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5581	F1H1A105A025	C CHIP 10V 1UF	
C5582	F1H1C104A065	C CHIP 16V 0.1UF	
C5583	F1H1C104A065	C CHIP 16V 0.1UF	
C5584	F1H1A105A025	C CHIP 10V 1UF	
C5585	F1H1A105A025	C CHIP 10V 1UF	
C5586	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5587	F1H1C104A065	C CHIP 16V 0.1UF	
C5588	ECJ1VB1C823K	C CHIP 16V 0.082UF	
C5589	F1H1H150A230	C CHIP 50V 15PF	
C5590	ECJ1VC1H180J	C CHIP 50V 18PF	
C5593	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5595	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5596	F1H1E104A030	C CHIP 25V 0.1UF	
C5598	F1H1A105A025	C CHIP 10V 1UF	
C5601	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5602	F1H1C104A065	C CHIP 16V 0.1UF	
C5604	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C5605	F1H1E104A030	C CHIP 25V 0.1UF	
C5607	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5609	F1H1A105A025	C CHIP 10V 1UF	
C5611	F1H1A105A025	C CHIP 10V 1UF	
C5612	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5613	F1H1A105A025	C CHIP 10V 1UF	
C5614	F1H1E104A030	C CHIP 25V 0.1UF	
C5615	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5616	F1H1E104A030	C CHIP 25V 0.1UF	
C5617	F1H1E104A030	C CHIP 25V 0.1UF	
C5618	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5619	F1H1E104A030	C CHIP 25V 0.1UF	
C5620	F1H1A105A025	C CHIP 10V 1UF	
C5623	F1H1C104A065	C CHIP 16V 0.1UF	
C6003	F1H1C104A065	C CHIP 16V 0.1UF	
C6004	F1H1H102A219	C CHIP 50V 1000PF	
C6013	F1H1A224A025	C CHIP 10V 0.22UF	
C6017	F1H1A105A025	C CHIP 10V 1UF	
C6018	FLJ1A106A024	C CHIP 10V 10UF	
C6019	FLJ1A106A024	C CHIP 10V 10UF	
C6020	ECJ1VC1H101J	C CHIP 50V 100PF	
C6021	FLJ1A106A024	C CHIP 10V 10UF	
C6022	F1H1C104A065	C CHIP 16V 0.1UF	
C6023	F1H1C104A065	C CHIP 16V 0.1UF	
C6025	F1H1C104A065	C CHIP 16V 0.1UF	
C6026	F1H1C104A065	C CHIP 16V 0.1UF	
C6027	F1H1C104A065	C CHIP 16V 0.1UF	
C6029	F1H1C104A065	C CHIP 16V 0.1UF	
C6031	F1H1C104A065	C CHIP 16V 0.1UF	
C6034	F1H1H220A230	C CHIP 50V 22PF	
C6035	ECJ1VC1H270J	C CHIP 50V 27PF	
C6037	F1H1H102A219	C CHIP 50V 1000PF	
C6038	F1H1A105A025	C CHIP 10V 1UF	
C6039	F1H1A105A025	C CHIP 10V 1UF	
C6040	F1H1A105A025	C CHIP 10V 1UF	
C6041	F1H1H102A219	C CHIP 50V 1000PF	
C6042	F1H1H102A219	C CHIP 50V 1000PF	
C6043	F1H1H102A219	C CHIP 50V 1000PF	
C6044	F1H1H102A219	C CHIP 50V 1000PF	



Ref. No.	Part No.	Part Name & Description	Remarks
C6045	FIH1H102A219	C CHIP 50V 1000PF	
C6048	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C6049	FIH1H102A219	C CHIP 50V 1000PF	
C8001	FIH1C104A065	C CHIP 16V 0.1UF	
C8002	FIH1A105A025	C CHIP 10V 1UF	
C8003	FIH1A105A025	C CHIP 10V 1UF	
C8004	FIH1A105A025	C CHIP 10V 1UF	
C8005	FIH1A105A025	C CHIP 10V 1UF	
C8006	FIG1A1040006	C CHIP 10V 0.1UF	
C8007	FIG1A1040006	C CHIP 10V 0.1UF	
C8008	FIG1A1040006	C CHIP 10V 0.1UF	
C8009	FIJ1A106A024	C CHIP 10V 10UF	
C8010	FIJ1A106A024	C CHIP 10V 10UF	
C8011	FIG1A1040006	C CHIP 10V 0.1UF	
C8012	FIG1A1040006	C CHIP 10V 0.1UF	
C8013	FIG1A1040006	C CHIP 10V 0.1UF	
C8014	FIG1A1040006	C CHIP 10V 0.1UF	
C8015	FIH1A105A025	C CHIP 10V 1UF	
C8016	FIH1A105A025	C CHIP 10V 1UF	
C8017	FIJ1A106A024	C CHIP 10V 10UF	
C8018	FIG1A1040006	C CHIP 10V 0.1UF	
C8019	FIG1A1040006	C CHIP 10V 0.1UF	
C8020	FIG1A1040006	C CHIP 10V 0.1UF	
C8021	FIG1A1040006	C CHIP 10V 0.1UF	
C8022	FIH1A105A025	C CHIP 10V 1UF	
C8023	FIJ1A106A024	C CHIP 10V 10UF	
C8024	FIJ1A106A024	C CHIP 10V 10UF	
C8025	FIG1A1040006	C CHIP 10V 0.1UF	
C8026	FIG1A1040006	C CHIP 10V 0.1UF	
C8027	FIG1A1040006	C CHIP 10V 0.1UF	
C8028	FIG1A1040006	C CHIP 10V 0.1UF	
C8029	FIG1A1040006	C CHIP 10V 0.1UF	
C8030	FIH1A105A025	C CHIP 10V 1UF	
C8031	FIH1A105A025	C CHIP 10V 1UF	
C8032	FIJ1A106A024	C CHIP 10V 10UF	
C8033	FIG1A1040006	C CHIP 10V 0.1UF	
C8034	FIG1A1040006	C CHIP 10V 0.1UF	
C8037	FIG1A1040006	C CHIP 10V 0.1UF	
C8038	FIG1A1040006	C CHIP 10V 0.1UF	
C8051	FIG1A1040006	C CHIP 10V 0.1UF	
C8052	FIH1A105A025	C CHIP 10V 1UF	
C8053	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8056	FIG1A1040006	C CHIP 10V 0.1UF	
C8057	FIG1A1040006	C CHIP 10V 0.1UF	
C8058	FIJ1A106A024	C CHIP 10V 10UF	
C8067	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8068	FIH1C104A065	C CHIP 16V 0.1UF	
C8069	ECJ1VC1H820J	C CHIP 50V 82PF	
C8070	FIG1A1040006	C CHIP 10V 0.1UF	
C8071	FIG1A1040006	C CHIP 10V 0.1UF	
C8072	FIG1A1040006	C CHIP 10V 0.1UF	
C8073	FIG1A1040006	C CHIP 10V 0.1UF	
C8074	FIG1A1040006	C CHIP 10V 0.1UF	
C8075	FIJ0G2260001	C CHIP 4V 22UF	
C8080	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8082	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8083	ECJ1VB1C473K	C CHIP 16V 0.047UF	
C8084	FIJ1C1050011	C CHIP 16V 1UF	
C8086	FIG1A1040006	C CHIP 10V 0.1UF	
C8087	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8088	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8201	FIH1C104A065	C CHIP 16V 0.1UF	
C8206	FIG1A1040006	C CHIP 10V 0.1UF	
C8207	FIG1A1040006	C CHIP 10V 0.1UF	
C8208	FIG1A1040006	C CHIP 10V 0.1UF	
C8209	FIG1A1040006	C CHIP 10V 0.1UF	
C8211	FIG1A1040006	C CHIP 10V 0.1UF	
C8212	FIG1A1040006	C CHIP 10V 0.1UF	
C8213	FIG1A1040006	C CHIP 10V 0.1UF	
C8214	FIJ1A106A024	C CHIP 10V 10UF	
C8215	FIJ1A106A024	C CHIP 10V 10UF	
C8216	FIG1A1040006	C CHIP 10V 0.1UF	
C8217	FIG1A1040006	C CHIP 10V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8218	F1G1A1040006	C CHIP 10V 0.1UF	
C8219	F1G1A1040006	C CHIP 10V 0.1UF	
C8405	F1H1C104A065	C CHIP 16V 0.1UF	
C8816	F1J1A106A024	C CHIP 10V 10UF	
C8871	F1H1H120A230	C CHIP 50V 12PF	
C8872	F1H1H120A230	C CHIP 50V 12PF	
C8873	F1H1C104A065	C CHIP 16V 0.1UF	
C8874	F1H1C104A065	C CHIP 16V 0.1UF	
C8875	F1H1C104A065	C CHIP 16V 0.1UF	
C8876	F1H1C104A065	C CHIP 16V 0.1UF	
C8877	F1H1C104A065	C CHIP 16V 0.1UF	
C8878	F1H1C104A065	C CHIP 16V 0.1UF	
C8879	F1H1C104A065	C CHIP 16V 0.1UF	
C8880	F1H1C104A065	C CHIP 16V 0.1UF	
C8881	F1H1C104A065	C CHIP 16V 0.1UF	
C8882	F1H1C104A065	C CHIP 16V 0.1UF	
C8885	F1H1C104A065	C CHIP 16V 0.1UF	
C8887	F1H1C104A065	C CHIP 16V 0.1UF	
C8888	F1H1C104A065	C CHIP 16V 0.1UF	
C8889	F1H1C104A065	C CHIP 16V 0.1UF	
C8890	F1H1C104A065	C CHIP 16V 0.1UF	
C8891	F1H1C104A065	C CHIP 16V 0.1UF	
C8892	F1H1C104A065	C CHIP 16V 0.1UF	
C8893	F1H1C104A065	C CHIP 16V 0.1UF	
C8895	F1H1C104A065	C CHIP 16V 0.1UF	
C8896	F1H1C104A065	C CHIP 16V 0.1UF	
C8901	F1H1C104A065	C CHIP 16V 0.1UF	
C8902	F1H1C104A065	C CHIP 16V 0.1UF	
C8903	F1H1C104A065	C CHIP 16V 0.1UF	
C8904	F1H1C104A065	C CHIP 16V 0.1UF	
C8905	F1H1C104A065	C CHIP 16V 0.1UF	
C8906	F1H1C104A065	C CHIP 16V 0.1UF	
C8907	F1H1C104A065	C CHIP 16V 0.1UF	
C8908	F1H1C104A065	C CHIP 16V 0.1UF	
C8909	F1H1C104A065	C CHIP 16V 0.1UF	
C8910	F1H1C104A065	C CHIP 16V 0.1UF	
C8911	F1H1C104A065	C CHIP 16V 0.1UF	
C8912	F1H1C104A065	C CHIP 16V 0.1UF	
C8913	F1H1C104A065	C CHIP 16V 0.1UF	
C8914	F1H1C104A065	C CHIP 16V 0.1UF	
C8915	F1H1C104A065	C CHIP 16V 0.1UF	
C8916	FIJ1A106A024	C CHIP 10V 10UF	
C8917	F1H1C104A065	C CHIP 16V 0.1UF	
C8918	FIH1A105A025	C CHIP 10V 1UF	
C8920	F1G1H1020008	C CHIP 50V 1000PF	
C8921	F1G1H1020008	C CHIP 50V 1000PF	
C8922	F1G1C103A048	C CHIP 16V 0.01UF	
C8923	F1G1C103A048	C CHIP 16V 0.01UF	
C8924	ECJ0EC1H270J	C CHIP 50V 27PF	
C8925	F1G1H120A422	C CHIP 50V 12PF	
C8926	F1G1H120A422	C CHIP 50V 12PF	
C8927	ECJ0EC1H270J	C CHIP 50V 27PF	
C8928	ECJ0EC1H101J	C CHIP 50V 100PF	
C8929	ECJ0EC1H101J	C CHIP 50V 100PF	
C8930	F1G1H470A557	C CHIP 50V 47PF	
C8931	F1G1H470A557	C CHIP 50V 47PF	
C8947	FIJ1A106A024	C CHIP 10V 10UF	
C8954	FIJ1A106A024	C CHIP 10V 10UF	
C8955	FIJ1A106A024	C CHIP 10V 10UF	
C8956	FIJ1A106A024	C CHIP 10V 10UF	
C8959	F1H1C104A065	C CHIP 16V 0.1UF	

## FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8201	J0HAAA000013	FILTER FOR EMI / EMC	
FL8202	J0HAAA000013	FILTER FOR EMI / EMC	
FL8803	J0MAB0000164	FILTER	
FL8813	J0MAB0000164	FILTER	

## COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1101	G1C220MA0234	COIL CHIP 22UH	



Ref. No.	Part No.	Part Name & Description	Remarks
L4002	J0JHC0000078	EMI FILTER CHIP	
L4003	J0JCC0000077	EMI FILTER CHIP	
L4004	G1C101KA0055	COIL CHIP 100UH	
L4501	G1C100MA0173	COIL CHIP 10UH	
L4502	G1C100MA0173	COIL CHIP 10UH	
L4503	G1C100MA0173	COIL CHIP 10UH	
L4504	G1C100MA0173	COIL CHIP 10UH	
L4505	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
L5000	J0JHC0000078	EMI FILTER CHIP	
L5001	J0JHC0000031	EMI FILTER CHIP	
L5002	J0JHC0000031	EMI FILTER CHIP	
L5003	J0JHC0000031	EMI FILTER CHIP	
L5004	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5005	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5006	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5007	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5008	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5009	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5010	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5011	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5012	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5013	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5014	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5015	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5016	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5017	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5018	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5019	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5020	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5021	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5022	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5023	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5024	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5025	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5026	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5027	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5028	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5029	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5030	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5031	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5032	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5500	J0JHC0000045	EMI FILTER CHIP	
L5501	J0JHC0000045	EMI FILTER CHIP	
L5502	J0JHC0000045	EMI FILTER CHIP	
L5503	J0JHC0000045	EMI FILTER CHIP	
L5504	J0JHC0000078	EMI FILTER CHIP	
L5505	J0JHC0000078	EMI FILTER CHIP	
L5506	J0JHC0000078	EMI FILTER CHIP	
L5507	J0JHC0000078	EMI FILTER CHIP	
L5508	J0JHC0000045	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L5512	J0JCC0000077	EMI FILTER CHIP	
L5515	J0JHC0000078	EMI FILTER CHIP	
L5516	J0JHC0000078	EMI FILTER CHIP	
L5518	J0JHC0000078	EMI FILTER CHIP	
L5520	J0JHC0000078	EMI FILTER CHIP	
L5521	J0JHC0000078	EMI FILTER CHIP	
L5522	G1C101KA0055	COIL CHIP 100UH	
L6001	J0JHC0000031	EMI FILTER CHIP	
L6002	J0JHC0000078	EMI FILTER CHIP	
L6003	J0JBC0000080	BEAD INDUCTOR CHIP	
L6004	J0JBC0000080	BEAD INDUCTOR CHIP	
L6005	J0JBC0000080	BEAD INDUCTOR CHIP	
L6006	J0JBC0000080	BEAD INDUCTOR CHIP	
L6007	J0JBC0000080	BEAD INDUCTOR CHIP	
L6008	J0JBC0000080	BEAD INDUCTOR CHIP	
L8001	J0JHC0000045	EMI FILTER CHIP	
L8002	J0JHC0000045	EMI FILTER CHIP	
L8003	J0JHC0000045	EMI FILTER CHIP	
L8004	J0JHC0000045	EMI FILTER CHIP	
L8005	J0JHC0000045	EMI FILTER CHIP	
L8006	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8007	J0JHC0000045	EMI FILTER CHIP	
L8008	J0JHC0000045	EMI FILTER CHIP	
L8009	J0JHC0000045	EMI FILTER CHIP	
L8010	J0JHC0000045	EMI FILTER CHIP	
L8201	J0JCC0000077	EMI FILTER CHIP	
L8401	J0JCC0000077	EMI FILTER CHIP	
L8817	G1CR22JA0020	COIL CHIP 0.22UH	
L8818	G1CR22JA0020	COIL CHIP 0.22UH	
L8819	G1CR39JA0020	COIL CHIP 0.39UH	
L8821	J0JHC0000045	EMI FILTER CHIP	
L8824	J0JHC0000045	EMI FILTER CHIP	
L8825	J0JHC0000045	EMI FILTER CHIP	
L8826	J0JCC0000100	EMI FILTER CHIP	
L8827	J0JCC0000100	EMI FILTER CHIP	
L8828	J0JHC0000045	EMI FILTER CHIP	

## CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X4001	H0J245500082	SURFACE MOUNTING CRYSTAL RESONATORS	
X5500	H0J270500113	SURFACE MOUNTING CRYSTAL RESONATORS	
X6001	H0J100500035	SURFACE MOUNTING CRYSTAL RESONATORS	
X8001	H0J270500114	SURFACE MOUNTING CRYSTAL RESONATORS	
X8801	H0J250500079	SURFACE MOUNTING CRYSTAL RESONATORS	

## PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN1101	K1KA14AA0153	CONNECTOR 14P	
CN1102	K1KA02AA0150	CONNECTOR 2P	
CN2001	K1MN36BA0112	CONNECTOR 36P	
CN2002	K1MN36BA0112	CONNECTOR 36P	
CN2003	K1MN36BA0112	CONNECTOR 36P	
CN3001	K1KB35BA0023	CONNECTOR 35P	
CN3002	K1FY115B0005	B-SUB JACK SOCKET	
CN4501	K1KA06AA0150	CONNECTOR 6P	
CN5500	K1FA119E0002	HDMI JACK SOCKET	
CN5501	K1FA119E0002	HDMI JACK SOCKET	
CN5503	K1KA30AA0009	CONNECTOR 30P	
CN6003	K1KA08AA0150	CONNECTOR 8P	
CN6005	K1KA07AA0104	CONNECTOR 7P	
CN8201	K1KA12AA0105	CONNECTOR 12P	
CN8401	K1KA04AA0104	CONNECTOR 4P	
CN8801	K1KB20A00165	CONNECTOR 20P	

## JACK

Ref. No.	Part No.	Part Name & Description	Remarks
JK3101	K2HC1YYB0001	JACKS FOR SMALL SIGNAL (EQUIPMENT SIDE )	